MINISTRY OF WATER, LAND AND AIR PROTECTION
MARINE SALMON FARMING
COMPLIANCE REPORT

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NB: Green shading/marking on charts represents compliance
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EXECUTIVE SUMMARY

A number of agencies including the Ministry of Agriculture, Food and Fisheries (MAFF), BC Assets and Lands Corporation (BCAL), Ministry of Sustainable Resource Management (MSRM), Ministry of Water, Land and Air Protection (MWLAP), and Fisheries and Oceans Canada (FOC) have responsibilities associated to the aquaculture industry. The MWLAP is responsible for ensuring protection of the marine environment and fish and wildlife species.

As a result of the Salmon Aquaculture Policy Framework announced in 1999, the ministry conducted inspections at a number of salmon farms in 2000 and 2001 and is pursuing investigations in regards to non-compliance issues noted in 2001. The ministry has also collected and analyzed sediment samples at and near a number of salmon farms to assess the health of benthic communities. This assessment was to support the development of "performance-based" standards for waste discharges and to audit the industry environmental monitoring program.

Compliance inspections were completed at 36% (44 farms) during the summer and fall of 2001. The number of farms inspected per company varied dependant upon the number of farms owned by a company.

Analysis of the 2001 inspection results indicates compliance with ministry legislation has improved, as compared to the results in 2000. Compliance with requirements regarding refuse and bloodwater disposal increased by over 30%, to 98% and 95%, respectively. Farms complying with the requirements for disposing of fish mortalities (morts) remained virtually unchanged at 91%.

Compliance rates for sewage treatment and disposal were calculated at 73% and 88%, also a marked improvement from 2000. Farms complying with firearm licencing requirements increased from 79% to 94%. Compliance with water licencing provisions improved to 25%.

Two additional activities examined more closely in the 2001 inspections were waste disposal resulting from net cleaning and used footbaths (disinfectants). A variety of handling and disposal methods resulting in untreated waste being discharged to the environment were documented. MWLAP is involved in discussions with industry to identify alternate disposal methods that will not impact the environment.

Observations were recorded regarding farm management practices introduced to reduce or eliminate effects upon the environment. Improvements were noted related to preventative and reactive management practices involving the storage and handling of wastes, feed management and spill prevention and response measures.

A number of factors contributed to the improvements implemented at the farm sites by industry. Discussions between the ministry and industry regarding a number of the issues identified in the inspections conducted in 2000 resulted in changes to waste management handling and disposal practices. The BC Salmon Farmers Association (BCSFA) Code of Practice has addressed a number of the concerns previously identified, and implementation of the code at the farm level has contributed to the improvements achieved.

Subsequent to the 2001 inspections, some farms have provided documentation to the ministry outlining improvements to the regulatory requirements and implementation of management practises. For example, three farms have achieved compliance with the sewage treatment and disposal regulatory requirements, and all inspected farms continuing to utilize stream water have applied for a water licence.

In regards to other waste disposal issues related to blood water, net cleaning and footbaths (disinfectants), the ministry is continuing to consult with industry and agencies, in order to ensure appropriate disposal options are examined. Information collected from the 2001 inspections is being used by the ministry to aid the development of amendments to the Aquaculture Waste Control Regulation due to be released in the spring of 2002.

Investigations for issues deemed to be in non-compliance with the ministry's regulatory requirements have been initiated. To date, many of the investigations have been completed, resulting in the issuance of four violation tickets for repetitive non-compliance issues and the issuance of warning letters for the remaining non-compliance issues.

The ministry continues to view the BCSFA Code of Practice as a useful tool to encourage farms to employ farm management practices that are protective of the environment.

As a follow-up to the sediment monitoring completed in 2000, the ministry and industry conducted sediment analyses on farms that were reaching peak production and farms identified as having a "probable" impact on the environment. Taxonomic analysis of the benthos requires approximately six months to complete. A separate report on the chemical and biological testing will be drafted once the results are available.

The 2001 Marine Salmon Farm Compliance Report documents an improvement in compliance with a number of ministry requirements. Through the exercising of diligence, the industry has an opportunity to increase the level of compliance beyond that recorded in 2001.

INTRODUCTION

The Ministry of Water, Land and Air Protection is mandated to manage, protect and conserve all water, land, air, plant life and animal life, having regard to the economic and social benefits they may provide to British Columbia. This mandate includes ensuring environmental protection of the marine environment.

With regards to BC's salmon farming industry, this mandate includes assessing impacts to fish and wildlife as the result of waste discharges, such as fish faeces, feed, sewage and blood water. The mandate also encompasses regulating the disposal of sewage, fish mortalities (morts), blood water, refuse and other wastes, the storage of hazardous materials, licencing and use of firearms.

In order to assess environmental impacts, ministry staff collected sediment samples from 11 farms during 2001, and are conducting analysis for a number of parameters. This monitoring program is a continuation of the sampling program initiated in 2000. These samples will serve as an audit of the industry's monitoring program and provide additional data to support the development of the performance based standards (PBS). The ministry will release the results of this sampling program at a later date.

With respect to monitoring compliance, the salmon farming industry is regulated by a number of provincial and federal acts and their associated regulations. Legislation administered by MWLAP and MSRM in relation to fish farms include the following:

- *Waste Management Act*
- Aquaculture Waste Control Regulation
- *Wildlife Act*
- *Pesticide Control Act*
- *Firearms Act*
- *Water Act*

Waste Management Act

The *Waste Management Act* regulates the discharge of waste into the environment. Waste is defined as a refuse, effluent, or air contaminant, capable of impacting human health, or the environment. The Act prohibits all waste discharges, except discharges conducted in accordance with a permit, approval, or an applicable regulation. The most applicable regulation is the Aquaculture Waste Control Regulation.

Waste discharges from salmon farms include sewage, fish faeces, feed, refuse, morts, blood water, net cleaning waste, used footbath, and fuel spills. Disposal of wastes may occur on or off site.

The majority of operations chose to dispose of wastes (excluding sewage) at off site facilities. For example, refuse and morts are taken to approved landfills or composting facilities, and blood water is transported to the processing plant. Farms removing these wastes off site are responsible to ensure the waste is being taken to an appropriate disposal or recycling location.

Wildlife Act

The *Wildlife Act* and the Commercial Activities Regulation regulates trapping of fur bearing animals by licensed trappers, and landowners. Fur bearing animals such as mink and river otter that become conditioned to feeding on farmed fish may be trapped by a licensed trapper during the open season or during closed season with authority from the Regional Wildlife Manager.

Water Act

The *Water Act* regulates the use of surface water for domestic, industrial and commercial use. A water licence is required in order to use surface water for an industrial purpose, such as marine fish farms.

In addition to these provincial acts, the ministry also assessed compliance with components of the *Federal Fisheries Act*, and BC Fire Code 1998, with respect to marine fish farms. The ministry informed companies of non-compliance issues noted on site, and referred this information to the appropriate agencies.

The *Federal Fisheries Act*, Marine Mammal Regulation, administered by Fisheries and Oceans, requires that a fish farm possess a marine mammal predator control licence to destroy marine mammals predating on farmed fish. This licence is renewed annually and all records must be maintained for inspection by a fishery officer or designated person.

The BC Fire Code 1998, administered by the BC Office of the Fire Commissioner, requires 110% containment for flammable or combustible liquids. The 110% containment requirement of the Code supports the *Waste Management Act* and its regulations in regards to spill prevention measures.

METHODOLOGY

MWLAP was involved in a joint agency/industry education program in May as part of the ministry's compliance inspections for 2001. Staff from the MAFF, MWLAP, FOC, and the BCSFA Code of Practice teams, conducted joint inspections at three fish farms located in the Clayoquot, Broughton and Quadra areas.

First Nation representatives from the fish farm areas inspected also participated. The objective was to provide a forum where all interested parties, including the companies involved, could gain insight into the inspection process. The sessions were held prior to government undertaking its inspections and helped to set the tone for upcoming inspections.

In addition to the three joint inspections conducted above, conservation officers from Vancouver Island and Powell River District inspected 41 fish farms between June to October 2001. The Conservation Officer Service completed 50% of the site inspections with MAFF inspectors.

Twelve companies categorized as a large, medium or small own fish farms in British Columbia (see Appendix 1 for the specific number of farms owned by the companies, and the percentage of farms inspected during 2001).

Five large companies own between 15 - 28 farms each. Combined, they own and operate 83% of the British Columbia salmon farms. Three medium-sized companies operate 4 - 8 farms each, and four companies own and operate one farm each.

All companies operate their fish farms on tenure sites assigned to them by BCAL, with the exception of two companies. Nutreco Canada Inc. (Marine Harvest) and Connors Bros. Ltd. (Heritage Aquaculture) each operate one farm site that the other company holds under tenure.

A minimum of one inspection was conducted per company with the objective to conduct inspections on a minimum of 25% of the active farm sites. In regards to the medium and large sized companies, the number of sites inspected was based on the ratio of the total number of farms owned. The specific farms chosen for inspection within each company was based on the 2000 compliance record, their proximity to other active farms inspected in remote areas, and the inspections conducted jointly with MAFF.

The majority of farms inspected in 2001 had been inspected in 2000. New sites inspected this year included farms that were fallow during the 2000 inspection period or farms which were relocated to new tenures.

Ministry inspections were conducted with farm staff present. Information was collected concerning the type of species on site, general housekeeping practices, administrative requirements and compliance with regulatory requirements related to MWLAP's and MSRM's mandate. The 2001 inspection form was updated to encompass all areas assessed in 2000, as well as other issues.

At the completion of an inspection, a compliance summary was provided to the farm. A completed copy of the inspection form was provided to the company head office, to ensure the information was correct, and to address any questions that farm staff could not answer (see Appendix 2 for the overview of the 2001 compliance summaries and management practises, and Appendix 3 for the company comparison records for 2000/2001).

Of the 44 farms inspected, 43 were actively growing finfish, and 72% of these had Atlantic salmon as their sole species, which is similar to the production in 2000. Sixteen percent of the farms raised chinook only and 12% of farms were raising Atlantics and/or chinooks, as well as other species, including coho salmon, rainbow trout and black cod (see Appendix 4 for the Inspection Checksheet).

2001 COMPLIANCE ANALYSIS

- There are thirty-five farms that utilize and dispose of footbath wastes and 46% of these farms discharge footbath wastes into septic tanks, mort totes or barge holding tanks in compliance with the provisions of the *Waste Management Act*. The remaining farms are discharging footbath waste directly into the marine environment, contrary to the provisions of *Waste Management Act*.

- Net cleaning occurs on land, floats and barges, and 34% of the farms are managing net cleaning waste in compliance with the provisions of the *Waste Management Act*.

- Forty of the forty-four farms inspected had washroom facilities. Twenty-eight farms were in full compliance with the sewage treatment and disposal requirements, eight farms complied with one of the requirements, and four sites failed to meet either requirement (pursuant to the Aquaculture Waste Control Regulation).

- Thirty-eight of the forty-three active farms inspected transport morts to an off site composting facility and one farm buries morts on site, pursuant to *Waste Management Act* provisions. The remaining four farms are in non-compliance with legislation and either incinerate, bury, or compost morts on site without ministry approval.

- Thirty-seven farms inspected either live haul fish, or stun and bleed fish on a barge and dispose of blood water at a processing facility in compliance with the provisions of the *Waste Management Act*. Of the remaining two farms that harvest, one farm routinely discharged blood water near the farm site, and the other farm discharged the blood water enroute to the processing facility on one occasion, in contravention of the legislation.

- All farms, with the exception of one site, dispose of refuse at an off site approved landfill in compliance with the provisions of the *Waste Management Act*. The one farm occasionally incinerates paper and organics on site, contrary to the legislation.

- Thirty-nine farms possessed federal marine mammal predator control licences and fifteen of these farms reported experiencing marine mammal predator problems. Ten farms destroyed seals or sealions during the last 12 months, in compliance with their federal licence. Ninety percent of these farms complied with the *Waste Management Act* with regards to carcass disposal.

- Three farms experienced problems with river otters, and two of three sites employed control measures in accordance with the provisions of the *Wildlife Act*.

- All firearms on site were for the purpose of predator control, and all but one of the farms possessing firearms at the time of inspection were in compliance with the federal firearm licensing requirements.

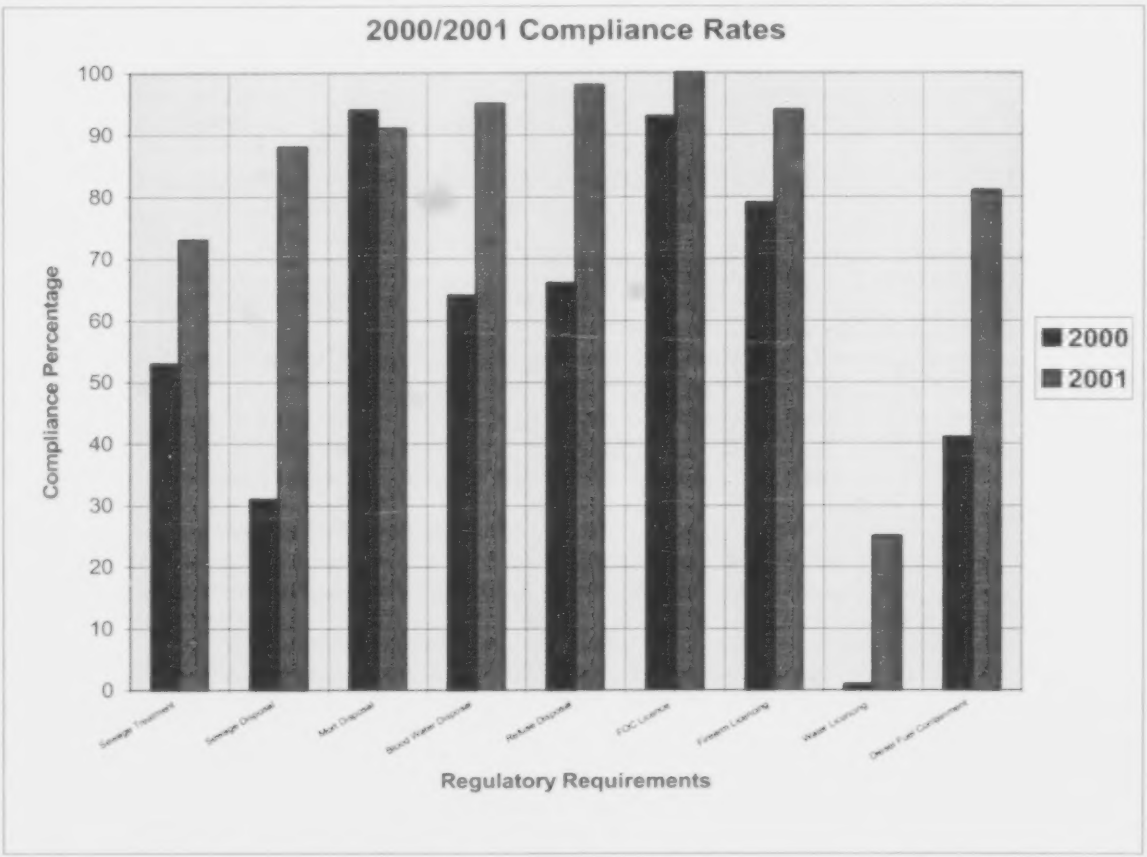
- Sixteen farms inspected utilize water from streams, four sites possessed water licences, in compliance with the provisions of the *Water Act*. Twelve farms did not have authority to use water at the time of inspection.

- The majority of farms store diesel, gas and/or propane on site, although some companies have chosen to have central fuel storage sites, which service several farms. Farms that had appropriate secondary containment for diesel fuel and gas, in accordance with the BC Fire Code 1998 , were 81% and 71%, respectively.

2000/2001 COMPLIANCE RATES

During 2000, 84 farms (69% of all tenured farms) were inspected, compared to 44 farms (36% of all tenured farms) in 2001. Nine regulatory requirements were assessed in 2000 and 2001, and the chart below reflects the compliance levels observed.

Chart 1



A number of activities undertaken subsequent to the inspections in 2000 have contributed to improvements in compliance. These activities included ministry inspections, discussions with industry, meetings, improved management practices, the installation of new or upgraded facilities, and the BCSFA Code of Practice initiatives.

For example, the substantial improvement in refuse disposal was as a result of companies instructing their staff to stop open burning paper products, and ensuring this recyclable material was taken to a recycling depot.

Improvements in blood water disposal was also as a result of companies instructing the barges that stun and bleed not to discharge the blood water into the marine environment, but rather dispose of the waste at the processing facility, where treatment is provided.

Improvements to fuel containment can be contributed to discussions between industry and several government agencies during fall 2000. Deficiencies in fuel containment were identified, and as a result, many companies undertook improvements to their fuel storage and handling, which is reflected in the results of the 2001 inspections.

REGULATORY REQUIREMENTS

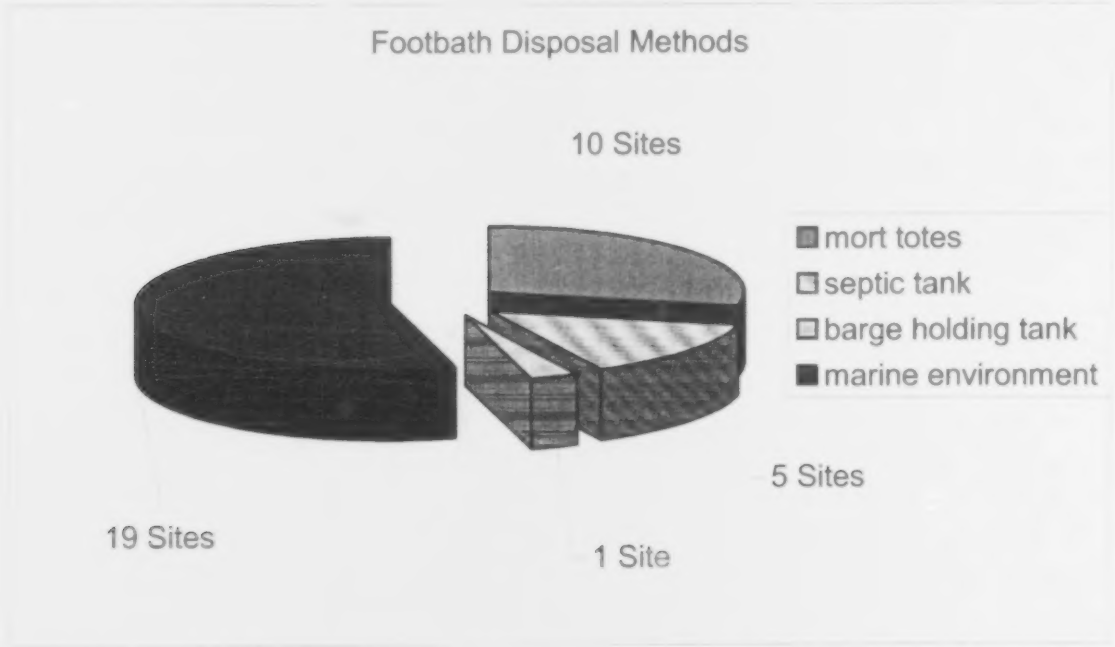
Regulatory requirements for the salmon farming industry are encompassed within a variety of provincial and federal acts and regulations.

A. FOOTBATH WASTE DISPOSAL

Footbaths (disinfectants) are utilized at farm sites to minimize the transfer of disease from farm to farm, as well as disease transfer within a farm. Over time, and when exposed to sunlight, the disinfectant's ability lessens. Common footbath solutions are virkon and ovadine.

Four farms do not use footbaths, due to being located in isolated areas. Four other farms mix the diluted footbath with a concentrated solution to compensate for evaporation. The remaining 35 operating sites dispose of the footbath wastes in the methods noted below.

Chart 2



In order to comply with the requirements of the *Waste Management Act*, footbath materials must not be capable of causing harm or injury to plant or animal life forms in the marine environment.

Discharging the footbath waste into septic tanks and mort totes prevent the direct discharge into the environment, however, these practices may have a negative impact on the septic tank operation, or the mort composting process.

Since the 2001 inspections, seven farms have ceased discharging the used footbath into the environment, and are utilizing other methods.

Footbath management practises and disposal options are currently under review by MWLAP and industry, and will be addressed within amendments to the *Aquaculture Waste Control Regulation* to be finalized in Spring 2002.

B. NET CLEANING WASTE DISPOSAL

Predator and containment nets may be chemically treated, in order to improve their longevity and strength, as well as to reduce fouling by marine plants and organisms. Seventy percent of the farms inspected treat their nets with a copper-based antifoulant agent. The treatment of nets is conducted at three locations on Vancouver Island.

The cleaning process typically conducted at least once a year removes mussels, algae, and other materials that have fouled the nets, as well as antifoulant from treated nets. The wastewater and debris generated through the net cleaning process can have a negative impact on oxygen levels in the marine environment and the benthic community.

Cleaning is conducted on and off site, and the resulting waste is either discharged on land or into the marine environment.

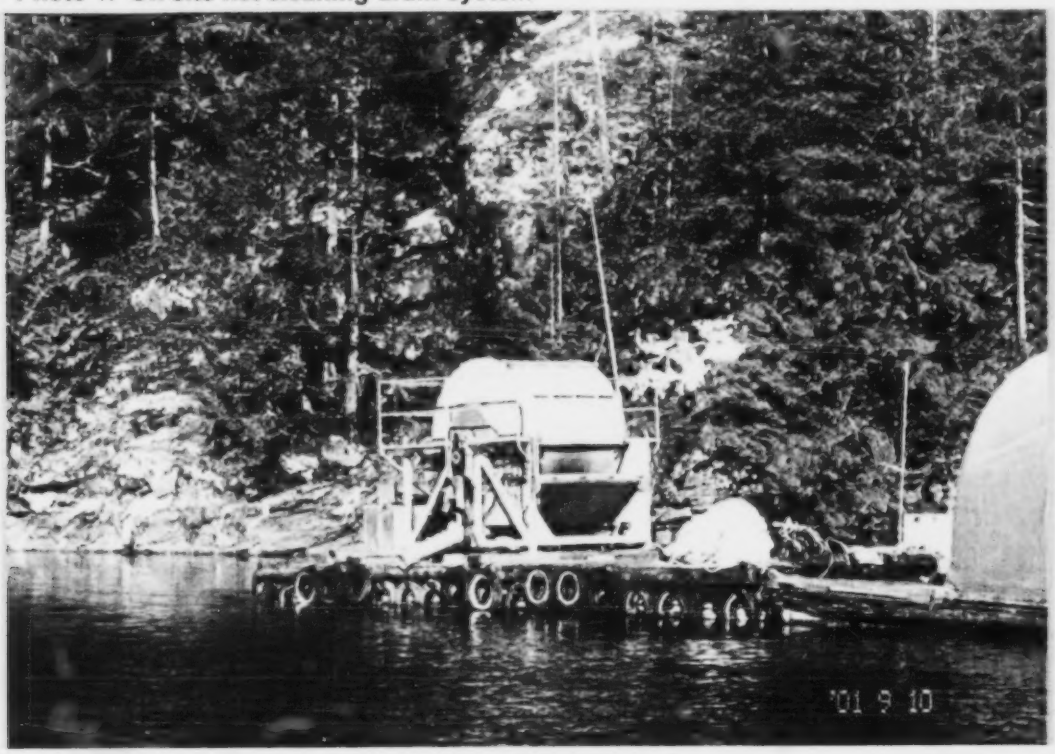
Chart 3

On site net cleaning includes pressure washing or drum washing conducted on a float at the farm, on adjacent land, or on a barge adjacent to the farm. All these methods result in the discharge of untreated wastewater to land or the marine environment.

Off site net cleaning includes two marine-based barge drum operations and one land-based facility. Fifteen farms manage their net cleaning waste in compliance with the *Waste Management Act* via the net cleaning operation at the land based facility.

Net cleaning management practices and disposal is currently under review by MWLAP and industry, and will be addressed within the amendments to the Aquaculture Waste Control Regulation to be finalized in Spring 2002.

Photo 1. On site net cleaning drum system



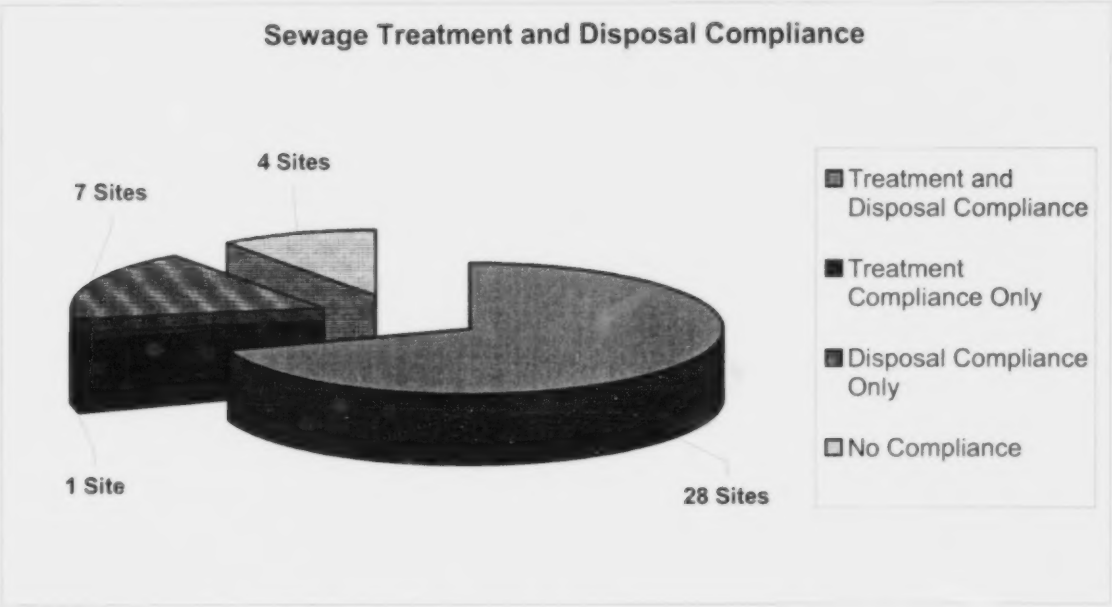
C. SEWAGE TREATMENT AND DISPOSAL

The majority of fish farms have living quarters on site, and collect, treat and discharge sewage at or near the farm location. Four of the farms inspected did not have living quarters on site and utilize the washroom facilities at nearby fish farms.

Untreated sewage has elevated biochemical oxygen demand and high toxicity, which may negatively impact the environment and fish. This waste also contains solids that may smother the ocean floor.

Of the forty farms inspected that have toilet facilities, 70% of these farms complied with both the sewage treatment and disposal requirements, as compared to 20% the previous year.

Chart 4



Farms deemed in compliance with sewage treatment had septic tanks with a minimum of two-day retention or composting toilets. Composting toilets recycle waste into a fertilizing soil. Compliance with this requirement has increased from 53% in 2000 to 73% in 2001.

Farms deemed in compliance with sewage disposal discharged from an outfall pipe greater than 15 meters below the surface water or to a tile field, or utilized a composting toilet. Compliance with this requirement has increased from 31% in 2000 to 88% in 2001.

Subsequent to the 2001 inspections, three farms have confirmed to the ministry in writing that sewage treatment facilities and/or sewage outfall discharges have been upgraded to comply with the regulations. Furthermore, two companies have committed to sewage treatment and disposal upgrades and are in the process of installing the new works.

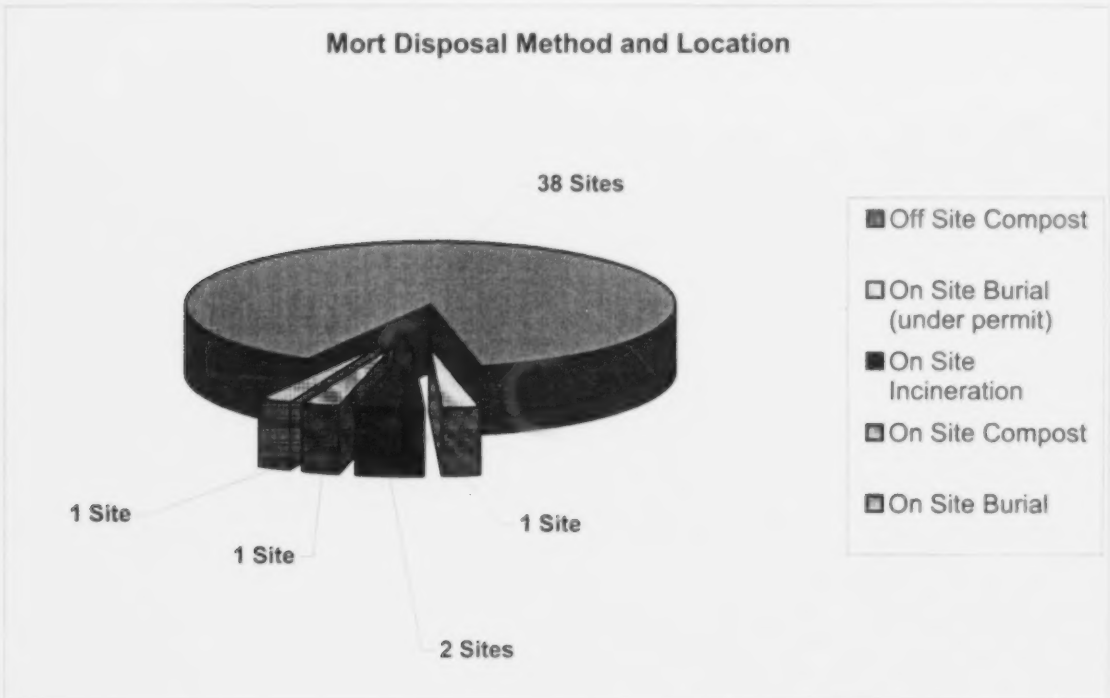
Amendments to the Aquaculture Waste Control Regulation that would adopt the Municipal Sewage Regulation are being considered. Farms producing a maximum of 10 cubic meters per day of sewage would require a septic tank capable of two days minimum retention time, and an effluent filter, screen or equivalent measures to protect pumps and prevent the discharge of solids and floatable material. For small, remote, seasonal discharges the regional waste manager may waive the requirement for an effluent filter.

D. MORT DISPOSAL

Morts are fish that have died prior to harvest due to a number of reasons including stress, plankton blooms, predator strikes or disease. Due to the high number of fish raised at fish farms, morts are anticipated, and dives are usually conducted weekly to recover the morts.

The majority of morts are removed off site to one of six authorized composting facilities on Vancouver Island.

Chart 5



Five farms inspected disposed of morts on site, of which one did so in compliance with a *Waste Management Act* permit. The remaining sites did not comply with the *Waste Management Act*.

Compliance with mort disposal requirements remains virtually unchanged from the previous year's inspections.

Photo 2. On site incinerator used to dispose of morts

E. BLOOD WATER DISPOSAL

Blood water associated with harvesting has a very high biochemical oxygen demand (BOD), and can negatively impact dissolved oxygen levels in the marine environment. The discharge of blood water to the environment also has the potential to impact wild stocks through the transmission of disease. Predators may also be attracted by the discharge of blood water.

Of the forty-three active farms inspected, four farms do not conduct harvesting, as they solely raise smolts to be transferred to other farm sites. The remaining thirty-nine farms harvest their stocks. Off-site harvest involving transport of live fish to one of nine fish processing facilities occurred at twenty-eight sites. The harvesting of fish, and the treatment and disposal of blood water and fish offal occurs at the processing facility. Treatment of these wastes at many facilities includes filtration prior to release to the marine environment.

On-site harvest involving stunning and bleeding fish prior to delivery to a processing facility occurred at eleven of the farms inspected. With the exception of two farms, blood water was contained on a barge, and transported to the processing facility with the fish. Of the remaining two farms, one farm routinely discharges blood water into the marine environment at the farm site, and blood water from the other farm was discharged into the marine environment on one occasion while the barge was enroute to the processing facility.

The compliance rate for proper blood water disposal increased from 64% in 2000 to 95% in 2001.

F. REFUSE DISPOSAL

All farms inspected with the exception of one site remove their refuse for disposal at one of the approved landfills on Vancouver Island and the Lower Mainland. The majority of farms also separate a variety of materials on site, to assist in the recycling of feed bags, plastics, and paper.

The remaining farm transports the majority of refuse to an approval landfill, but does incinerate organics and paper on site, in non-compliance with the requirements of the *Waste Management Act*.

Compliance with refuse disposal requirements has increased from 66% to 98%, subsequent to most farms ceasing open burning of paper products.

G. PREDATOR PREVENTION AND RESPONSE

Thirty-nine of the farms inspected possessed a FOC marine mammal predator control licence. Of these farm sites, fifteen farms reported experiencing problems with marine mammal predators. Ten of these farms destroyed marine mammals and at eight of these farms the marine mammal carcasses sank. The remaining sites recovered the carcasses and either buried them above the high water mark or removed them off site in mort totes.

In addition to farms experiencing marine mammal problems, there were three farms that experienced problems with otters. Two farm sites utilized licensed trappers, which resulted in two otters being destroyed at one farm. The third farm used their own staff to attempt to live trap problem otters, but was unsuccessful. This site was advised that trapping of wildlife is only to be conducted in accordance with the provisions of the *Wildlife Act*.

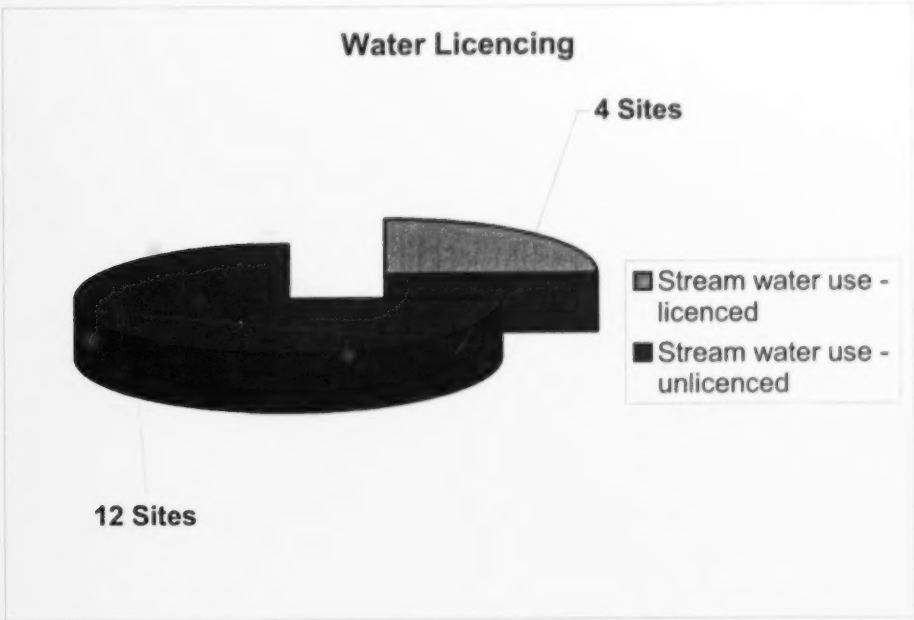
Seventeen of the thirty-nine farms that possessed a predator licence had firearms on-site during the inspections. With the exception of one farm, all firearm possession was in compliance with federal legislative requirements. This farm has subsequently removed the firearm off site until appropriate licences have been obtained.

H. WATER LICENCING

Sixteen of the farms inspected utilized freshwater in their operations with the majority utilizing freshwater solely for use in the staff living quarters. Four farms possessed water licences.

Two of the farms inspected were licenced for smolt lensing (smolts are placed in a pen that has a freshwater lens on the surface, in order to acclimatize them) and two farms held licences for water used in their living quarters. The remaining twelve sites did not hold water licences, nor had any applications for water licenses been submitted at the time of inspection.

Chart 6



Compliance with the requirement to possess a water licence has increased from less than 1% in 2000, to 25% in 2001. The majority of sites in non-compliance with this provision last year continued to be in non-compliance.

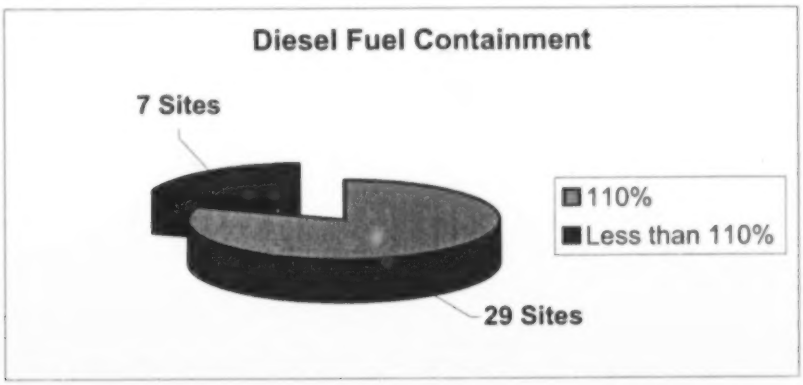
Subsequent to the 2001 inspections, one of the non-compliant farms has installed a water retention tank and has ceased utilizing stream water and the remaining eleven farms not possessing a water licence during the 2001 inspections have since submitted water licence applications. There have also been several other farms not inspected during 2001 that have submitted water licence applications.

I. FUEL CONTAINMENT

The majority of farms store diesel, gasoline and/or propane on site for power generation or as a heating source.

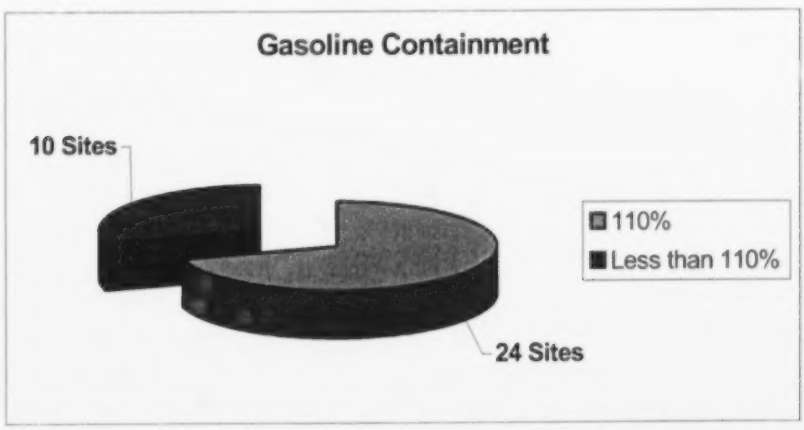
Eighty-two percent of the farms inspected stored diesel on site, as diesel generators are the main power source for the majority of the farms. The majority of these farms stored 900 – 7,000 litres of diesel in one or two large tanks. Most of the diesel tanks were either double walled or positioned within a 110% containment system. The farms that did not have diesel storage on site relied on a fuel barge to supply fuel as required.

Chart 7



Gasoline was stored on site in jerry cans or large double walled tanks at 77% of the inspected farms and was used for gas-powered boats and generators. The majority of farms stored volumes between 200 – 2,000 litres.

Chart 8



Propane was stored at 77% of the farms, for use in the staff living quarters for heat and hot water.

Photo 3. Diesel fuel with 110% containment (double walled) and protection from precipitation

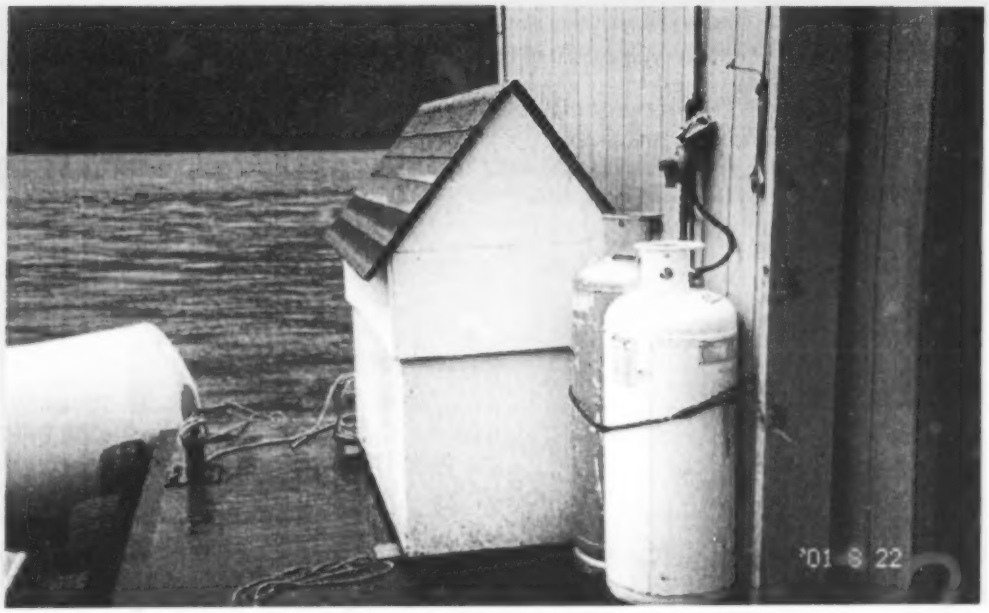


Photo 4. Gasoline containment and protection from precipitation

ENVIRONMENTAL MANAGEMENT PRACTICES

There are a variety of management practices that may reduce or eliminate effects upon the environment. Practices include the secure storage and handling of wastes, feed management, and spill prevention and response.

A. STORAGE AND HANDLING OF WASTES

Management practices related to the storage of refuse, morts, sewage and blood water were observed. The inspections determined that all farms were storing refuse in a manner that prevented the attraction of wildlife and spillage into the environment. Locking devices on totes and containers were observed and measures were in place to protect the refuse from exposure to the elements.

Inspections revealed that 98% of the farms adequately store morts and had implemented management practices to prevent spillage to the environment. This is a substantial improvement from 57% in 2000.

Secure mort and refuse disposal reduces the attraction of wildlife and marine mammals to the farm site, thereby reducing the need to engage in relocation or lethal methods to control wildlife at the farms.

Eighteen of the twenty-eight farms that have septic tanks have implemented practices that include conducting routine inspections of their septic facilities. Inspection and maintenance of septic facilities help to prevent malfunction and spillage into the environment.

Storage and containment of blood water was not an overall concern, as all but two farms confirmed these wastes are contained on a transport barge prior to disposal at a processing facility.

B. STORAGE AND HANDLING OF FEED

Ninety-eight percent of the farms inspected have implemented practices to prevent the accidental discharge of feed into the environment, which is an improvement from 69% in 2000. Thirteen of the farms inspected were using medicated feed, prescribed by a veterinarian.

A variety of practices were observed at the farms designed to prevent excessive feeding. Practices included underwater cameras, doppler sensor devices, uplift or cone systems, and visual monitoring of fish feeding behaviour.

C. SPILL PREVENTION AND RESPONSE

Many farm sites store a variety of petroleum products and chemicals on site. An environmental management system addresses preventative steps to be taken to minimize the risk of a discharge into the environment, as well as reactive measures to minimize the severity of a spill, if one was to occur.

Since the ministry inspections conducted in 2000, the majority of farms have implemented measures to ensure their diesel, gas, propane tanks and generators were protected from precipitation, and accidental impacts from machinery/vessels.

In addition, 77% of the diesel generators were located within a spill containment system. Due to wear and vibration from the generators, failure or damage to transfer lines or other generator components may occur. The provision of spill containment is a good management practice.

Observations in year 2000 determined that 55% of the farms had spill recovery equipment on site; 18% had contingency plans for fuel spills and 42% had the Provincial Emergency Program (PEP) spill reporting number posted. Substantial improvements were noted in 2001 in each category, as recorded in the chart below.

Chart 9

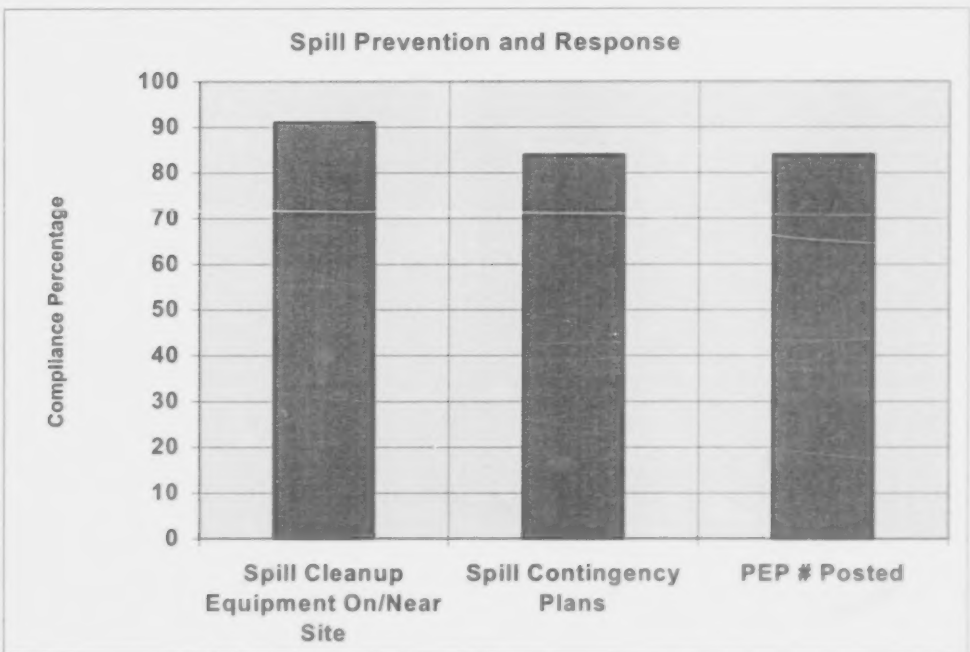


Photo 5. On site spill kit and cleanup equipment.

CONCLUSIONS

Overall, the salmon farming industry's level of compliance with MWLAP and MSRM regulatory requirements has shown improvement in 2001, as a result of a number of activities undertaken subsequent to the inspections in 2000. Continuing improvements have also been noted subsequent to the 2001 inspections. These improvements can be attributed to a number of factors, including ministry inspections, discussions with industry, improved management practices, the installation of new or upgraded facilities, investigations, and the BC Salmon Farmer's Association Code of Practice initiatives.

The 2001 inspections ascertained that compliance levels for waste treatment and disposal, firearm licencing, and water licencing in general has improved from 2000 levels. Net cleaning and footbath waste disposal was not examined during 2000, but compliance levels noted during 2001 demonstrate that improvements in compliance in these areas are required.

In order for the industry to improve compliance rates for some of the regulatory requirements, improvements to facilities and further employee training are required. At the time of preparing this report, many companies have committed to making improvements, or have provided documentation outlining upgrades already completed.

Investigations for issues deemed to be in non-compliance with the ministry's regulatory requirements have been initiated. The ministry utilizes a graduated enforcement approach to address non-compliance that includes assessing the impact to the environment, past compliance history of the offender, measures implemented to reduce harm or risk, industry standards, and the need for general or specific deterrence. An appropriate enforcement response will be implemented at the conclusion of an investigation of alleged non-compliance.

The 2001 inspections also revealed that industry is continuing to implement management practices to prevent the discharge of waste into the environment, and to reduce the attraction of wildlife and marine mammals to farm sites.

Improvements to management practices demonstrate that companies are taking greater responsibility in managing their farm operations. As done following the 2000 compliance inspections, the ministry will be forwarding recommendations to the BCSFA as a result of the 2001 inspections, in order to assist in the development and improvements of the BCSFA Code of Practice. An effective code that is audited on a regular basis, with the results released publicly, demonstrates industry's commitment to environmental protection.

The Aquaculture Waste Control Regulation is being amended to include new performance based standards for farm wastes, and consideration will be given as to which of the compliance issues identified in this report are best addressed through amendments to the Aquaculture Waste Control Regulation. In order to support the proposed amendments, MWLAP will continue to consult with industry and appropriate government agencies regarding waste disposal issues such as net washing, footbath, and blood water.

APPENDIX 1

COMPANY LIST AND NUMBER OF FARMS/COMPANIES INSPECTED IN 2001

COMPANY LIST AND NUMBER OF FARMS/COMPANIES INSPECTED IN 2001

Company	Number and Percentage of total Tenures (farms) owned in BC	Number and Percentage of Tenures (farms) Inspected by MWLAP
LARGE SIZED COMPANIES	**# (%)**	**# (%)**
Stolt Sea Farm Inc.	28 (23%)	9 (32%)
Omega Salmon Group Ltd.	25 (21%)	8 (32%)
EWOS Canada Ltd.	17 (14%)	5 (29%)
Connors Bros Ltd	15 (12%)	4 (27%)
Nutreco Canada Inc.	15 (12%)	7 (47%*)
MEDIUM SIZED COMPANIES		
Target Marine Products Ltd.	8 (7%)	2 (25%)
Creative Salmon Company Ltd.	5 (4%)	2 (40%)
Grieg Seafood BC Ltd.	4 (3%)	3 (75%**)
SMALL SIZED COMPANIES		
Omega Pacific Seafarms Inc.	1 (1%)	1 (100%)
Saltstream Engineering Ltd.	1 (1%)	1 (100%)
Yellow Island Aquaculture Ltd.	1 (1%)	1 (100%)
Totem Oysters Ltd.	1 (1%)	1 (100%)
TOTALS FOR ALL COMPANIES	**121 (100%)**	**44 (36%)**

The five large companies own and operate 83% of all British Columbia fish farms. The three medium sized companies own and operate 14% of fish farms and the small companies own and operate 3% of fish farms.

Company sites were inspected based on a variety of factors including the ratio of the total active company sites owned, 2000 farm compliance records, proximity of active farms to each other in remote areas, and sites inspected in co-ordination with the MAFF inspection schedule.[1]

***Higher ratio of sites inspected due to all the above stated factors**

****Higher ratio of sites inspected due to all company sites located in one remote area.**

APPENDIX 2

OVERVIEW OF COMPLIANCE WITH REGULATORY REQUIREMENTS AND OVERVIEW OF MANAGEMENT PRACTICES FOR 2001

This table depicts company specific data utilized to prepare the industry wide compliance levels. Compliance levels reflect only farms where the regulatory requirement was applicable. For example, total industry compliance for Fresh Water Usage is 4/16, which means that only 16 farms utilized stream water, and four of those sites possessed water licences.

	REGULATORY REQUIREMENTS												
Company	**Disposal of Bloodwater Compliance pursuant to WMA**	**Disposal of Net Cleaning Waste Compliance pursuant to WMA**	**Fresh Water Usage Compliance pursuant to Water Act**	**Disposal of Morts Compliance pursuant to WMA**	**Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act**	**FOC Predator Licence Compliance pursuant to Federal Fisheries Act**	**Predator Prevention & Carcass Disposal Compliance pursuant to WMA**	**Firearm Provincial Licensing Compliance pursuant to Provincial Legislation**	**Treatment of Sewage Compliance pursuant to AWCR**	**Disposal of Sewage Compliance pursuant to AWCR**	**Disposal of Refuse Compliance pursuant to WMA**	**110% Containment of Diesel Compliance pursuant to BC Fire Code**	**Disposal of Footbath Disinfectant Compliance pursuant to WMA**
Stolt Sea Farm Inc. 9 farms inspected	8/8	8/9	0/2	8/8	0/0	8/8	2/2	0/0	9/9	8/9	9/9	7/7	6/8
Omega Salmon Group Ltd. 8 farms inspected	5/5	0/8	2/2	6/8	0/1	8/8	0/0	6/6	3/8	5/8	7/8	4/8	0/6
EWOS Canada Ltd. 5 farms inspected	4/5	0/5	0/0	5/5	1/1	5/5	0/0	0/0	2/2	2/2	5/5	2/3	1/4
Connors Bros Ltd. 4 farms inspected	4/4	1/4	0/2	4/4	0/0	3/3	0/0	0/0	2/4	4/4	4/4	3/4	2/4
Nutreco Canada Inc. 7 farms inspected	7/7	6/7	0/6	7/7	1/1	7/7	⅚	4/5	7/7	7/7	7/7	7/7	6/7
Target Marine Products Ltd. 2 farms inspected	1/1	0/2	0/0	2/2	0/0	2/2	1/1	2/2	1/1	1/1	2/2	1/1	0/0
Creative Salmon Company Ltd. 2 farms inspected	2/2	0/2	0/1	2/2	0/0	0/0	0/0	0/0	0/2	1/2	2/2	0/1	1/2
Grieg Seafood BC Ltd. 3 farms inspected	3/3	0/3	0/1	3/3	0/0	2/2	1/1	1/1	1/3	3/3	3/3	3/3	0/3
Omega Pacific Seafarms Inc. 1 farm inspected	1/1	0/1	0/0	1/1	0/0	1/1	0/0	0/0	1/1	1/1	1/1	0/0	0/0
Saltstream Engineering Ltd. 1 farm inspected	1/1	0/1	1/1	1/1	0/0	1/1	1/1	1/1	1/1	1/1	1/1	0/0	0/1
Yellow Island Aquaculture Ltd. 1 farm inspected	0/1	0/1	0/0	0/1	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0
Totem Oysters Ltd. 1 farm inspected	1/1	0/1	1/1	0/1	0/0	1/1	0/0	1/1	1/1	1/1	1/1	1/1	0/0
TOTAL INDUSTRY COMPLIANCE	**37/39** **95%**	**15/44** **34%**	**4/16** **25%**	**39/43** **91%**	**2/3** **67%**	**39/39** **100%**	**9/10** **90%**	**16/17** **94%**	**29/40** **73%**	**35/40** **88%**	**43/44** **98%**	**29/36** **81%**	**16/35** **46%**

This table depicts company specific data utilized to prepare the industry management practices. The industry totals reflect only farms where the practice was applicable. For example, total industry containment with generator sets is 30/39, which means that 39 farms had generators, and 30 sites implemented 110 % containment.

	MANAGEMENT PRACTICES													
Company	**Secure Blood Water Storage**	**Secure Net Waste Storage**	**Secure Feed Storage**	**TV Monitors to Regulate Feeding**	**Secure Mort Storage**	**Washroom Facility located on-site**	**Secure Refuse Storage**	**Hazardous Materials Protected from Precipitation**	**Secure Hazardous Materials Storage**	**Adequate Spill Collection Equipment on Site**	**Contingency Plans Available on Site**	**Spill Reporting Phone # Posted (PEP)**	**110% Containment with the Generator Set**	**Fuel Valves and Hoses Protected from Heavy Traffic**
Stolt Seafarm Inc. 9 farms inspected	8/8	8/9	9/9	8/9	8/8	9/9	9/9	9/9	9/9	9/9	9/9	9/9	9/9	9/9
Omega Salmon Group Ltd. 8 farms inspected	5/5	0/8	7/8	3/8	8/8	8/8	8/8	8/8	8/8	8/8	7/8	7/8	3/8	8/8
EWOS Canada Ltd. 5 farms inspected	4/5	0/5	5/5	5/5	5/5	2/5	5/5	3/4	4/4	2/4	5/5	3/5	4/4	3/3
Connors Bros. Ltd. 4 farms inspected	4/4	1/4	4/4	4/4	4/4	4/4	4/4	3/4	3/4	4/4	4/4	4/4	4/4	4/4
Nutreco Canada Inc. 7 farms inspected	7/7	6/7	7/7	7/7	7/7	7/7	7/7	7/7	7/7	7/7	6/7	7/7	5/7	7/7
Target Marine Products Ltd 2 farms inspected	1/1	0/2	2/2	0/2	2/2	½	2/2	0/1	1/1	2/2	2/2	2/2	1/1	1/1
Creative Salmon Company Ltd. 2 farms inspected	2/2	0/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	1/2	2/2	2/2	2/2
Grieg Seafood BC Ltd. 3 farms inspected	3/3	0/3	3/3	0/3	3/3	3/3	3/3	3/3	3/3	3/3	0/3	0/3	1/3	3/3
Omega Pacific Seafarms Inc. 1 farm inspected	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	1/1
Saltstream Engineering Ltd. 1 farm inspected	1/1	0/1	1/1	0/1	1/1	1/1	1/1	0/0	0/0	1/1	1/1	1/1	0/0	0/0
Yellow Island Aquaculture Ltd. 1 farm inspected	0/1	0/1	1/1	1/1	0/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1	0/0	1/1
Totem Oysters Ltd. 1 farm inspected	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1	0/1	1/1	1/1
INDUSTRY TOTAL	**37/39 95%**	**15/44 34%**	**43/44 98%**	**32/44 73%**	**42/43 98%**	**40/44 91%**	**44/44 100%**	**38/41 93%**	**39/41 95%**	**40/43 93%**	**37/44 84%**	**37/44 84%**	**30/39 77%**	**40/40 100%**

APPENDIX 3

COMPANY COMPARISON RECORDS FOR FISH FARM INSPECTION RESULTS FOR 2000/2001

CONNERS BROS LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)

Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Separately Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
11	RE-14186	Okisollo - Brent Island	*	y	*	y	y	y	*	y	n	y	y	y	*	y	y	y	n	y	y	y	n	y	n	y	*	y	y	y
16	RE-13888	Cecil Island	*	y	*	n	*	y	*	y	*	y	y	y	*	y	y	n	y	n	y	y	n	y	*	y	*	y	y	y
20	RE-14180	Burdwood	n/i	y	n/i	n	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	*	n	n/i	y
29	PE-15607	Sonora Point Nutreco Canada Inc. Operated by Conners Bros in 2000	*	y	*	n	y	y	*	y	n	y	y	y	*	y	y	y	n	y	y	y	n	y	y	y	*	y	n	y

y = practice/system on site
n = practice/system not on site
* = category not used/assessed
n/i = site not inspected in 2000

REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)

Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Mortality Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Capture Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no licenses, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
11	RE-14186	Okisollo - Brent Island	n	y	*	y	n	n (2)	y	y	*	n/a	y	y	n/a	n/a	y	n/a	y	y	y	y	y	y	n	y	n	y	*	y
16	RE-13888	Cecil Island	y	y	*	n	n/a	n/a	y	y	*	n/a	y	y	y	n/a	y	n/a	n	n	y	y	n	y	n/a	n (1)	*	n (1)		
20	RE-14180	Burdwood	n/i	y	n/i	n	n/i	n/a	n/i	y	n/i	n/a	n/i	y	n/i	n/a	n/i	n/a	n/i	n	n/i	y	n/i	y	n/i	y	n/i	n (1)		
29	PE-15607	Sonora Point Nutreco Canada Inc. Operated by Conners Bros in 2000	n	y	*	n	n	n (2)	y	y	*	n/a	y	n/a	y	n/a	n/a	n/a	y	y	y	y	y	y	y	y	*	y		

y = in compliance
n = out of compliance
n (1) = since inspection, company provided written documentation that practice is now compliant
n (2) = since inspection, water licence application has been received
n/a= not applicable
* = category not us

CREATIVE SALMON COMPANY LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
1	RE-13894	Indian Bay, Tofino Inlet	*	y	*	n	y	y	*	y	*	y	y	y	*	y	y	y	y	y	*	y	*	n	y	y	*	y	y	y
3	RE-13926	Baxter Islets	*	y	*	n	y	y	*	y	y	y	y	y	*	y	y	y	y	y	n	y	n	y	y	y	*	y	y	y

y = practice/system on site
n = practice/system not on site
* = category not used/assessed

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Licence Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Footbath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ lensing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no licence, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
1	RE-13894	Indian Bay, Tofino Inlet	n	y	*	n	n	n (2)	y	y	*	n/a	y	n/a	y	n/a	n/a	n/a	n	n (1)	n	n (1)	y	y	n/a	n	*	n
3	RE-13926	Baxter Islets	y	y	*	n	n/a	n/a	y	y	*	n/a	y	n/a	y	n/a	n/a	n/a	n	n (1)	n	y	y	y	n	n/a	*	y

y = in compliance
n = out of compliance
n (1) = since inspection, company provided written documentation that practice is now compliant
n (2) = since inspection, water licence application has been received
n/a = not applicable
* = category not used/assessed

EWOS CANADA LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																													
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
71	RE-13131	Dixon Bay	F	y	F	n	F	y	F	y	F	y	F	n	F	y	F	n/a	F	n/a	F	n/a	F	y	F	y	F	n/a	F	n/a		
76	RE-15714	Barc Bluff, Bedwell Sound	*	n	*	n	y	y	*	y	n	y	n	n	*	y	y	y	y	y	n	n	y	y	n	y	*	y	y	y		
77	PE-9132	Bedwell	*	y	*	n	y	y	*	y	y	y	y	y	*	y	y	n	n	y	n	y	n	y	n	n	*	y	y	y		
81	PE-14596	Westside	F	y	F	n	F	y	F	y	F	y	F	n	F	y	F	y	F	y	F	n	F	y	F	n	F	y	F	y		
82	RE-15707	Millar Channel (E. side Millar Channel)	*	y	*	n	y	y	*	y	y	y	y	y	*	y	y	y	y	y	n	y	n	y	n	y	*	y	n/a	n/a		

y = practice/system on site
n = practice/system not on site
n/a = not applicable
* = category not used/assessed
F = farm fallow

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																													
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Lisence Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothoth Disinfectant Compliance pursuant to Waste Mgmt Act		
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		o/a means no license, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no footbath disposal conducted		
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001		
71	RE-13131	Dixon Bay	F	y	F	n	F	n/a	F	y	F	n/a	F	y	F	n/a	F	n/a	F	n/a	F	n/a	F	n/a	F	y	F	n/a	F	n		
76	RE-15714	Barc Bluff, Bedwell Sound	y	n	*	n	n	n/a	y	y	*	y	y	y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	y	y	y	y	*	y				
77	PE-9132	Bedwell	y	y	*	n	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	n/a	n/a	n	y	*	y	y	y	y	n	*	n				
81	PE-14596	Westside	F	y	F	n	F	n/a	F	y	F	n/a	F	y	F	n/a	F	n/a	F	n/a	F	n/a	F	y	F	y	F	n/a				
82	RE-15707	Millar Channel (E. side Millar Channel)	y	y	*	n	n	n/a	y	y	*	n/a	y	y	n/a	n/a	y	n/a	*	y	*	y	y	y	y	n/a	*	n				

y = in compliance
n = out of compliance
n/a = not applicable
* = category not used/assessed
F = farm fallow

GRIEG SEAFOOD B.C. LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hose Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
6	RE-11950	Hecate (site#2)	*	y	*	n (1)	y	y	*	n (1)	y	y	y	y	*	y	y	y	n	y	y	y	n	n (1)	n	n (1)	*	y	y	y
7	RE-11950	Lutes Creek (site#1)	*	y	*	n (1)	y	y	*	n (1)	y	y	y	y	*	y	y	y	n	y	y	y	n	n (1)	n	n (1)	*	n	y	y
9	RE-11908	Cliff Cove	F	y	F	n (1)	F	y	F	n (1)	F	y	F	y	F	y	F	y	F	y	F	y	F	n (1)	F	n (1)	F	n	F	y

y = practice/system on site
n = practice/system not on site
n (1) = since inspection, company provided written documentation that practice in place
* = category not used/assessed
F = farm fallow

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Mortis Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Licence Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ hroding site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no licence, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearm on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
6	RE-11950	Hecate (site#2)	*	y	*	n (1)	n/a	n/a	y	y	*	n/a	y	y	y	n/a	n/a	n/a	n	y	y	y	y	y	n/a	y	*	n (1)		
7	RE-11950	Lutes Creek (site#1)	y	y	*	n (1)	n	n (2)	y	y	*	n/a	y	y	n/a	y	n	y	n	n	y	y	y	y	n	y	*	n (1)		
9	RE-11908	Cliff Cove	F	y	F	n (1)	F	n/a	F	y	F	n/a	F	n/a	F	n/a	F	n/a	F	n	F	y	F	y	F	y	F	n (1)		

y = in compliance
n = out of compliance
n (1) = since inspection, company provided written documentation that practice is now compliant
n (2) = since inspection, water licence application has been received
n/a = not applicable
* = category not used/assess

NUTRECO CANADA INC.

Record of Fishfarm Inspection Checksheet 2000/2001

Checklist 2001 #	WLAP Permit / Reg #	Site Location	MANAGEMENT PRACTICES (Practices & Systems that Eliminate/Minimize Risk of Legislative Non-Compliance)																											
			Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
24	PE-15695	Raza Island Connors Bros Ltd. Operated by Nutreco in 2001	*	y	*	y	y	y	*	y	n	y	y	y	*	y	y	y	y	y	n	y	n	y	y	y	*	y	*	y
25	RE-13164	Yeo Point (Salt Spring)	*	y	*	y	n	y	*	y	y	y	y	y	*	y	y	y	n	y	n	y	n	y	n	y	*	n	y	y
26	PE-10639	Conville Bay	*	y	*	y	y	y	*	y	y	y	y	y	*	y	y	y	y	y	y	y	y	y	n	y	*	n (1)	y	y
28	PE-8539	Dunsterville Bay	*	y	*	y	y	y	*	y	y	y	y	y	*	y	y	y	y	y	y	y	y	y	y	y	*	n (1)	y	y
31	PE-10649	Centre Cove, Whiteley Island	*	y	*	y	*	y	*	y	y	y	y	y	*	y	n	y	n	y	y	y	n	y	n	y	*	y	y	y
34	PE-15696	Young Pass	*	y	*	n	y	y	*	y	n	y	y	y	*	y	y	y	y	y	n	y	y	n	n	y	*	y	y	y
35	PE-15004	Cyrus Rocks	*	y	*	y	y	y	*	y	y	y	y	y	*	y	y	y	y	y	y	y	y	y	y	y	*	y	y	y

y = practice/system in site

Checklist 2001 #	WLAP Permit / Reg #	Site Location	REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																											
			Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Lethal Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no license, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
24	PE-15695	Raza Island Connors Bros Ltd. Operated by Nutreco in 2001	n	y	*	y	n	n (2)	y	y	*	n/a	y	y	y	y	*	y	y	y	n	y	n	y	y	y	*	n
25	RE-13164	Yeo Point (Salt Spring)	y	y	*	y	n/a	n/a	n	y	*	y	y	y	y	n/a	n/a	y	n/a	y	n/a	y	y	y	n	y	*	y
26	PE-10639	Conville Bay	n	y	*	y	n	n (2)	y	y	*	n/a	y	y	n/a	n (1)	n	y	n	y	y	y	n	y	n	y	*	y
28	PE-8539	Dunsterville Bay	y	y	*	y	n	n (2)	y	y	*	n/a	y	y	y	n/a	n/a	n/a	y	y	y	y	n	y	n/a	y	*	y
31	PE-10649	Centre Cove, Whiteley Island	*	y	*	y	n	n (2)	y	y	*	n/a	y	y	y	n/a	y	y	y	y	y	y	y	y	y	y	*	y
34	PE-15696	Young Pass	n	y	*	n	n	n (2)	y	y	*	n/a	y	y	n/a	n/a	n	n (1)	y	y	n	y	n	y	n	y	*	y
35	PE-15004	Cyrus Rocks	y	y	*	y	n	n (2)	y	y	*	n/a	y	y	n/a	n/a	n	n (1)	y	y	n	y	n	y	n	y	*	y

y = in compliance

OMEGA PACIFIC SEAFARMS INC.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																									
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency Phone # Posted)		110% Containment with the Groundwater Act		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
40	RE-13107	Jane Bay	*	y	*	n	y	y	*	y	y	y	y	y	*	y	y	y	y	y	y	y	y	y	y	y	*	n/a	y	y

y = practice/system on site
n = practice/system not on site
n/a = not applicable
* = category not used/assessed

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																									
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Lavors Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no license, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no foothath used on site	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
40	RE-13107	Jane Bay	y	y	*	n	n/a	n/a	y	y	*	n/a	y	y	y	n/a	y	n/a	y	y	y	y	n	y	n/a	n/a	*	n/a		

y = in compliance
n = out of compliance
n/a = not applicable
* = category not used/assessed

OMEGA SALMON GROUP LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

Checklist 2001 #	WLAP Permit / Reg. #	Site Location	MANAGEMENT PRACTICES (Practices & Systems to Minimize/Eliminate Risk of Legislative Non-Compliance)																									
			Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency Phone # Posted		100% Containment with Air Conveyor Set		Feed Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
41	RE-13171	Hardy Bay	*	y	*	n	*	n	*	n	*	y	y	y	*	y	n	y	y	y	n	y	n	y	n	y	*	y	y	y
45	PE-14688	Rayner Group	*	y	*	n	*	y	*	y	*	y	y	y	*	y	n	y	y	y	n	y	n	y	n	n	*	n	y	y
46	PE-14690	Shelter Pass	*	n/a	*	n	*	n	*	y	*	y	y	y	*	y	n	y	y	y	n	y	n	y	n	y	*	n	y	y
47	PE-14691	Bell Island	*	n/a	*	n	*	y	*	n	*	y	y	y	*	y	n	y	y	y	n	y	n	y	n	y	*	n	y	y
56	PE-14687	Shelter Bay	n/i	y	n/i	n	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	n	n/i	y
57	RE-14194	Glacial Creek	*	y	*	n	y	y	*	n	*	y	y	y	*	y	n	y	n	y	n	n	n	n	y	y	*	y	n	y
61	RE-13934	Homfray Creek	*	n/a	*	n	y	y	*	n	y	y	y	y	*	y	n	y	y	y	n	n	n	y	*	y	*	y	n	y
63	Pending	Marsh Bay	n/i	y	n/i	n	n/i	y	n/i	n	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	n	n/i	y

y = practice/system on site
n = practice/system not on site

Checklist 2001 #	WLAP Permit / Reg. #	Site Location	REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																									
			Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Permit Terms Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Agricultural Waste Control Reg.		Disposal of Sewage Compliance pursuant to Agricultural Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		100% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Footbath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ rearing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted				n/a means no firearms, and did not destroy marine mammals		n/a means no firearms on site		n/a means no treatment facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no footbath used on site or no footbath disposal conducted	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
41	RE-13171	Hardy Bay	y	y	*	n	n/a	n/a	*	n/a	y	y	y	y	y	n/a	y	y	y	y	n	n	y	y	y	y	y	y	*	n
45	PE-14688	Rayner Group	y	y	*	n	n/a	n/a	*	n	y	y	y	y	y	n/a	y	y	y	y	n	n	y	n	y	y	n	n	*	n
46	PE-14690	Shelter Pass	*	n/a	*	n	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	y	y	n	y	y	y	y	y	y	y	n	n	*	n
47	PE-14691	Bell Island	y	n/a	*	n	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	y	n/a	n	n	n	y	y	y	y	y	n	y	*	n
56	PE-14687	Shelter Bay	n/i	y	n/i	n	n/i	n/a	n/i	y	n/i	n/a	n/i	y	n/i	n/a	n/i	y	n/i	n	n/i	n	n/i	n	n/i	y	n/i	n	n/i	n
57	RE-14194	Glacial Creek	*	y	*	n	y	y	*	n	*	n/a	y	y	n/a	n/a	n	n	y	y	y	y	y	y	y	y	n	n	*	n/a
61	RE-13934	Homfray Creek	y	n/a	*	n	y	y	y	n	*	n/a	y	y	y	n/a	y	y	y	y	y	y	y	y	n	y	n	y	*	n/a
63	Pending	Marsh Bay	n/i	y	n/i	n	n/i	n/a	n/i	y	n/i	n/a	n/i	y	n/i	n/a	n/i	n/a	n/i	n	n/i	n	n/i	y	n/i	y	n/i	n	n/i	n

y = in compliance
n = out of compliance

SALTSTREAM ENGINEERING LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																									
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Fuel Storage		TV Monitors in Regulator Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
53	RE-11907	Doctor Bay	*	y	*	n	n	n	*	n	n	y	n	y	*	y	n	n/a	y	n/a	n	y	n	y	n	n	*	n/a	y	n/a

y = practice/system on site
n = practice/system not on site
n/a = not applicable
* = category not used/assessed

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																									
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Control Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Footbath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ rearing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no license, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
53	RE-11907	Doctor Bay	y	y	*	n	y	y	y	y	*	n/a	y	y	y	y	y	y	y	y	y	y	y	y	y	y	n	n/a	*	n

y = in compliance
n = out of compliance
n/a = not applicable
* = category not used/assessed

STOLT SEAFARM INC.

Record of Fishfarm Inspection Checksheet 2000/2001

Checklist 2001 #	WLAP Permit / Reg #	Site Location	MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance): Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
85	RE-13178	Port Elizabeth	*	y	*	y	*	y	*	y	y	y		y	*	y		y	n	y	y	y	n	y		y	y	*	y		y	y
87	PE-10598	Brougham Point	F	y	F	y	F	y	F	y	F	y		y	F	y		n	y	y	y	y	n	y		y	y	F	y		n	y
90	PE-13915	Sargisson Pass	*	y	*	n (1)	n	y	*	y	n	y		y	*	y		y	n	y	n	y	n	y		y	y	*	y		y	y
94	RE-13916	Upper Retreat	*	y	*	y	y	y	*	y	y	y		y	*	y		y	y	y	y	y	n	y		n	y	*	y		y	y
95	PE-14406	Midsummer Island: Spring Passage	*	y	*	y	*	y	*	y	*	y		y	*	y		y	y	y	y	y	n	y		y	y	*	y		y	y
96	PE-14408	Swanson Island	*	y	*	y	*	y	*	y	*	y		y	*	y		y	y	y	y	y	n	y		y	y	*	y		y	y
105	RE-13924	Potts	F	y	F	y	F	y	F	n	F	y		y	F	y		F	y	F	y	F	y	F		y	y	F	y		F	y
109	PE-13190	Larsen	F	y	F	y	F	y	F	y	F	y		y	F	y		F	y	F	y	F	y	F		y	y	F	y		F	y
111	Pending	Knight Inlet: Deacon Inlet	n/i	F	n/i	y	n/i	y	n/i	y	n/i	F	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y	n/i	y

y = practice/system on site
n = practice/system not on site
n(1) = since inspection, company provided written documentation that practice in place
* = category not used/assessed
n/i = site not inspected in 2000
F = farm fallow

Checklist 2001 #	WLAP Permit / Reg #	Site Location	REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation): Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act	Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act	Fresh Water Usage Compliance pursuant to Water Act	Disposal of Mort's Compliance pursuant to Waste Mgmt Act	Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act	Fisheries & Oceans Canada Predator Licence Compliance pursuant to Federal Fisheries Act	Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act	Firearm Possession Licensing Compliance pursuant to Provincial Legislation	Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.	Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.	Disposal of Refuse Compliance pursuant to Waste Mgmt Act	110% Containment of Diesel Compliance pursuant to BC Fire Code	Disposal of Footbath Disinfectant Compliance pursuant to Waste Mgmt Act
			n/a means site is nursery/ leasing site (no harvest)		n/a means water obtained from sources other than a stream		n/a means trapping of wildlife not conducted	n/a means no licence, and did not destroy marine mammals	n/a means did not destroy marine mammals	n/a means no firearms on site	n/a means no washroom facility on-site	n/a means no washroom facility on site		n/a means no diesel stored on site	n/a means no footbath used on site
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
85	RE-13178	Port Elizabeth	y	y	*	y	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	n/a	n/a	y	y	y	y	n	y		y	y	*	y	
87	PE-10598	Brougham Point	F	y	F	y	n	n (1)	F	y	F	n/a	F	y	F	y	F	n/a	y	y	n	n (1)	n	y		n/a	y	F	n (1)	
90	PE-13915	Sargisson Pass	y	y	*	n (1)	n	n (2)	y	y	*	n/a	n	y	n/a	n/a	*	y	n	y	n	y	n	y		n	y	*	n (1)	
94	RE-13916	Upper Retreat	y	y	*	y	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	y	n/a	y	y	n	y	y	y		y	y	*	y	
95	PE-14406	Midsummer Island: Spring Passage	y	y	*	y	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	n/a	n/a	y	y	y	y	n	y		y	y	*	y	
96	PE-14408	Swanson Island	y	y	*	y	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	n/a	n/a	y	y	y	y	n	y		y	y	*	y	
105	RE-13924	Potts	F	y	F	y	F	n/a	F	y	F	n/a	F	y	F	n/a	F	n/a	F	y	F	y	F	y		F	n/a	F	y	
109	PE-13190	Larsen	F	y	F	y	F	n/a	F	y	F	n/a	F	y	F	n/a	F	n/a	F	y	F	y	F	y		F	y	F	y	
111	Pending	Knight Inlet: Deacon Inlet	n/i	F	n/i	y	n/i	n/a	n/i	F	n/i	n/a	n/i	n/a	n/i	n/a	n/i	n/a	n/i	y	n/i	y	n/i	y		n/i	n/a	n/i	n/a	

y = in compliance
n = out of compliance
n (1) = since inspection, company provided written documentation that practice is now compliant or not applicable
n (2) = since inspection, water licence application has been received
n/a = not applicable

TARGET MARINE PRODUCTS LTD

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																													
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
117	RE-13897	Power Bay	*	y	*	n	y	y	*	n	*	y	y	y	*	y	y	n (1)	y	y	n	y	n	y	n	y	*	y	y	y		
118	RE-13896	Jervis Cove	*	n/a	*	n	y	y	*	n	*	y	y	n	*	y	n/a	n/a	n/a	n/a	y	y	y	y	y	y	*	n/a	n/a	n/a		

y = practice/system on site
n = practice/system not on site
n (1) = since inspection, company provided written documentation that practice in place
n/a = not applicable
* = category not used/assessed

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																													
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Licence Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foothath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ lensing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no license, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no foothath disposal conducted			
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
117	RE-13897	Power Bay	y	y	*	n	n/a	n/a	y	y	*	n/a	y	y	y	y	y	y	y	y	n	y	n	y	y	y	y	y	*	n/a		
118	RE-13896	Jervis Cove	y	n/a	*	n	n/a	n/a	y	y	*	n/a	y	y	n/a	n/a	n/a	y	n	n/a	n	n/a	y	y	n/a	n/a	*	n/a				

y = in compliance
n = out of compliance
n/a = not applicable
* = category not used/assessed

TOTEM OYSTERS LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Cabinetry Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
120	RE-13927	St. Vincent Bay, Jervis Inlet	*	y	*	n		y	*	y		y		y	*	y		y		y		n		n		n		n	*	y		n

y = practice/system on site
n = practice/system not on site

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Mort Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Lincese Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Foodfish Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no farmer, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no foodfish used on site	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
120	RE-13927	St. Vincent Bay, Jervis Inlet	y	y	*	n	y	y	n	n	*	n/a	*	y	*	n/a	*	y	y	y	*	y	n	y			n	y	*	n/a

y = in compliance
n = out of compliance

YELLOW ISLAND AQUACULTURE (1994) LTD.

Record of Fishfarm Inspection Checksheet 2000/2001

			MANAGEMENT PRACTICES (Practices & Systems that Minimize/Eliminate Risk of Legislative Non-Compliance)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Secure Bloodwater Storage		Secure Net Waste Storage		Secure Feed Storage		TV Monitors to Regulate Feeding		Secure Mort Storage		Washroom Facility located on-site		Secure Refuse Storage		Hazardous Materials Protected from Precipitation		Hazardous Materials Securely Stored		Adequate Spill Collection Equipment on Site		Contingency Plans Available on Site		Spill Reporting (Provincial Emergency) Phone # Posted		110% Containment with the Generator Set		Fuel Valves and Hoses Protected from Heavy Traffic	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
121	RE-13192	Yellow Island	*	n	*	n	y	y	*	y	n	n (1)	y	y	*	y	n	y	n	n (1)	*	n	*	y	y	y	*	n/a	n	y

y = practice/system on site
n = prac

			REGULATORY REQUIREMENTS (Variety of Provincial & Federal Legislation)																											
Checklist 2001 #	WLAP Permit / Reg #	Site Location	Disposal of Bloodwater Compliance pursuant to Waste Mgmt Act		Disposal of Net Cleaning Waste Compliance pursuant to Waste Mgmt Act		Fresh Water Usage Compliance pursuant to Water Act		Disposal of Morts Compliance pursuant to Waste Mgmt Act		Predator Prevention (Trapping of Wildlife) Compliance pursuant to Wildlife Act		Fisheries & Oceans Canada Predator Licence Compliance pursuant to Federal Fisheries Act		Predator Prevention & Carcass Disposal Compliance pursuant to Waste Mgmt Act		Firearm Provincial Licensing Compliance pursuant to Provincial Legislation		Treatment of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Sewage Compliance pursuant to Aquaculture Waste Control Reg.		Disposal of Refuse Compliance pursuant to Waste Mgmt Act		110% Containment of Diesel Compliance pursuant to BC Fire Code		Disposal of Footbath Disinfectant Compliance pursuant to Waste Mgmt Act	
			n/a means site is nursery/ leasing site (no harvest)				n/a means water obtained from sources other than a stream				n/a means trapping of wildlife not conducted		n/a means no licence, and did not destroy marine mammals		n/a means did not destroy marine mammals		n/a means no firearms on site		n/a means no washroom facility on-site		n/a means no washroom facility on site				n/a means no diesel stored on site		n/a means no footbath used on site	
			2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
121	RE-13192	Yellow Island	n	n	*	n	n/a	n/a	n	n	*	n/a	y	y	y	y	y	y	y	y	y	y	y	y	n	y	n/a	y	*	n/a

y = in compliance
n = out of compliance

APPENDIX 4

2001 MINISTRY OF WATER, LAND AND AIR PROTECTION
FISH FARM SITE INSPECTION CHECKSHEET

MINISTRY OF WATER, LAND & AIR PROTECTION
FISH FARM SITE INSPECTION

INSPECTION DATE: _____ MWLAP FILE#: _____
BCAL FILE#: _____

COMPANY: _____

LOCATION: _____

COMPANY CONTACT: _____ POSITION: _____ PHONE# _____

MINISTRY INSPECTOR: _____ OTHER INSPECTOR: _____

GPS COORDINATES:
Net Pens (MWLAP)*: _____ Farm Data: _____
Residence (MWLAP): _____
*To be obtained from point as close to center of net pens as possible.

Site Layout: Provide a sketch of site on Appendix 1 or an up-to-date site layout diagram from farm.

The 2001 Fish Farm Site Inspection contains 11 categories, which involve information gathering of sites to assess management practices and compliance with legislation. It is imperative that all information requested within this checklist be obtained, either by on-site company staff, or the company head office.

A. HARVESTING PRACTICES

General Information:

- ***Specie(s) type and numbers (assess biomass and potential impacts on the benthic community).***
- ***Location and date of harvest (on-site or off-site).***

Management Practices:

- ***Method of blood water containment (secure containment prevents spillage and the attraction of predators/wildlife).***

Regulatory Requirements:

- ***Method and location of blood water treatment and disposal.***

Species	# of Fish on Site	Harvest		Anticipated Dates of Harvest	
		Stun and Bleed	Live Haul	Date #1	Date # 2
Atlantic					
Chinook					
Coho					

If Stun and Bleed harvest:

Method of Blood Water Containment	Secure Storage		Treatment		Disposal	
	Y	N	On Site	Off Site	On Site	Off Site

If applicable
(a) How is storage insecure? _____
(b) How is blood water treated on site? _____
(c) Where is blood water disposed on site? _____
(d) What is the volume of blood water disposed on site? _____

NOTES:

_____
_____
_____
_____
_____

B. TREATMENT AND NET CLEANING

General Information:

- ***Net treatment product and methods (monitor products potentially discharged into the environment).***
- ***Net cleaning location (on-site or off-site).***

Management Practices:

- ***Method of net cleaning and frequency.***
- ***Method of net waste containment (secure containment prevents spillage and the attraction of predators/wildlife).***

Regulatory Requirements:

- ***Method and location of net cleaning, waste treatment and disposal.***

Treatment Frequency	Treatment Products (Copper, Aquavac)	Location of Treatment	
		On Site	Off Site

Net Cleaning: On Site ☐ Off Site ☐

Cleaning Frequency	Cleaning Location	Cleaning Method	Secure Storage & Containment of Net Waste		Waste Treatment		Waste Disposal	
			Y	N	On Site	Off Site	On Site	Off Site

If applicable:

(a) How is net waste storage insecure? _____
(b) How is net waste treated on site? _____
(c) Where is the net waste disposed on site? _____

Are the nets strength tested during cleaning? ☐ yes ☐ no

NOTES:

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_____
_____
_____

C. WATER USE AND LICENSING

General Information:

- ***Source and purpose of fresh water use.***

Regulatory Requirements:

- ***Use of freshwater from a stream/lake.***

Source of Fresh Water	Water Licence			Licence Available and Licence #	Stream/Lake Name
	Yes	No	N/A		

What does this site use this water for? Staff Living Quarters ☐ Net Cleaning ☐
Smolt Lensing ☐ Other ☐
Explain: _____

NOTES:

_____
_____
_____
_____
_____

D. FEED HANDLING

General Information:

- ***Feed type and volume (assess biomass and potential impacts on benthic community).***
- ***Gas bubbles observations (sign of build-up of benthic organics and potential creation of gases).***

Management Practices:

- ***Method of feed containment and storage (secure containment prevents spillage and the attraction of predators/wildlife).***
- ***Method of feed monitoring (TV) to prevent excessive feeding.***

Max Volume of Feed on site	Secure Storage		Type of Medicated Feed	TV Monitors To Regulate Feeding	
	Y	N		Y	N

If applicable:

(a) How is the feed storage insecure? _____

(b) If no TV monitors, how is excessive feeding prevented? _____

(c) Were gas bubbles observed coming to the surface? ☐ yes ☐ no

NOTES:

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_____

E. MORT STORAGE AND DISPOSAL

General Information:

- ***Volume of morts stored on-site, location and frequency of mort removal off-site.***

Management Practices:

- ***Method of mort containment (secure containment prevents spillage and the attraction of predators/wildlife).***

Regulatory Requirements:

- ***Method of mort disposal and location.***

Max Volume of Mort Storage	Secure Mort Storage		Frequency of Mort Removal from Site	Evidence of Spillage into Environment	
	Y	N		Y	N

If applicable:

(a) How is the storage insecure? _____

(b) What is the volume of spillage, and how is it entering the environment?

_____

Method of Mort Disposal	On Site	Off Site	Disposal Location	MWLAP On Site Disposal Authorization/ Permit #	Disposal/ Recycling Company
Ensilage					
Render					
Compost					
Bury					
Incinerate					
Other					

NOTES:

_____

_____

_____

_____

F. PREDATOR PREVENTION

General Information:

- ***Predator specie(s) type and numbers (assess impacts of wildlife/predators on site).***
- ***Type(s) of predator prevention devices in use.***

Management Practices:

- ***Wildlife/predators attractants to site.***

Regulatory Requirements:

- ***Wildlife/predator destruction, disposal method and location.***

1. In the past twelve months, has the farm experienced predator attraction problems?
   ☐ yes ☐ no

2. Source of Predator/Wildlife attraction:
   ☐ fish stocks ☐ fish feed
   ☐ morts ☐ cooking facilities
   ☐ refuse ☐ other _____

Species	Number of Nuisance Animals	Number of Destroyed Animals	DFO/MWLAP Licence/ Permit #	Disposal Method (sink/bury/other)	Disposal Location	Permit/Licence for Disposal Y/N
Bear						
Mink						
Otter						
Seal						
Sea Lion						
Blue Heron						
Eagle						
Other (describe)						

3. Predator prevention devices observed in use at time of inspection:

☐ Acoustic deterrent devices	☐ Predator Nets/Shark Guards	☐ Dogs
☐ Firearms	☐ Bird Nets/Lines	☐ Electric fencing
☐ Lights	☐ Trapping	☐ Other _____

4. If trapping of wildlife is done on site is it conducted by? ☐ licensed trapper ☐ site/company staff

(a) If licensed trapper, name of trapper:_____
(b) What are number and type of species trapped? _____
(c) Are the species live trapped ☐ yes ☐ no

NOTES:

_____
_____
_____

G. FIREARMS

General Information:

- ***Firearms use.***

Regulatory Requirements:

- ***Firearm and ammunition storage and possession.***

1. Are firearms stored on site? ☐ yes ☐ no

2. What is the purpose for firearms on site?
☐ predator control
☐ personal use/hunting

Responsible Person	Federal POL # Possession Only Licence	Federal PAL # Possession & Acquisition Licence	Provincial Hunting Licence #

NOTES:

_____
_____
_____
_____
_____

H. SEWAGE TREATMENT AND DISPOSAL

General Information:

- ***Sewage volume and treatment method(s) (monitor sewage production and discharge into environment).***

Management Practices:

- ***Records and frequency of sewage inspection/maintenance (prevention for sewage spillage).***

Regulatory Requirements:

- ***Method of treatment (minimum septic tank with 2 day retention)***
- ***Method of discharge (minimum depth 15m).***
- ***Volume of sewage (maximum 10 people).***

1. Is there a washroom facility on site? ☐ yes ☐ no

2. What is the current method of sewage treatment? _____

3. If septic tank system:

   (a) Does it provide a 2-day retention period? ☐ yes ☐ no ☐ u/k

   (b) What is the maximum # of people on-site? _____

   (c) What is the volume of the tank? _____

4. Is sewage discharged into the marine environment? ☐ yes ☐ no
   If yes, what is the discharge outfall depth in meters? _____

5. Are there records of the sewage inspections/maintenance? ☐ yes ☐ no

6. What is the frequency of inspections? _____

NOTES:

_____

_____

_____

_____

_____

I. REFUSE STORAGE AND DISPOSAL

General Information:

- *Type(s) of refuse generated, frequency of removal off-site and description of disposal.*

Management Practices:

- *Method of refuse containment (secure containment prevents spillage and the attraction of predators/wildlife).*

Regulatory Requirements:

- *Method and location of disposal.*

Types of Refuse	Secure Storage		Frequency of Removal	Description of Off Site Disposal	Description of On Site Disposal	Permit #/ Authorization, for On Site Disposal
	Y	N				

If applicable:

(a) Are any wastes separated and recycled? _____

(b) How is the storage insecure? _____

(c) Incinerator information:

☐ Auxiliary fuel ☐ Refractory lined ☐ Secondary combustion model

NOTES:

_____

_____

_____

_____

_____

J. STORAGE AND HANDLING OF HAZARDOUS MATERIALS AND WASTES

General Information:

- ***Type, volume and location of hazardous materials stored on-site (for spill monitoring purposes).***

Management Practices:

- ***Method of storage of hazardous material to minimize spills/releases into environment (machinery valves/hoses, heavy precipitation)***

Regulatory Requirements:

- ***Spill containment for hazardous materials (to prevent spillage into the environment).***
- ***Method and location of footbath disinfectant treatment and disposal (used to prevent the spread of disease).***

Type	Maximum Capacity (litters)	% Spill Containment	Securely Stored (Y/N)	Protected From Precipitation (Y/N)	Location Stored On Site
Fuel (diesel)					
Fuel (diesel)					
Fuel (diesel)					
Gasoline					
Gasoline					
Propane					
Waste oil					
Antifreeze					
Therapeutants					
Disinfectants (Foot baths)					
Anaesthetics					
Antifoulants					
Batteries					

1. If applicable, how are the hazardous materials insecurely stored ?

   _____

2. (a) Is a footbath being used on-site? ☐ yes ☐ no
   (b) What disinfectant is used? _____
   (c) Is the disinfectant treated on site? ☐ yes ☐ no
   (d) How is the disinfectant treated? _____
   (e) How is the disinfectant disposed? _____

3. How are waste batteries disposed?_____

4. How is waste oil disposed?_____

NOTES:

_____

_____

_____

_____

K. ENVIRONMENTAL MANAGEMENT

Management Practices:

- ***Spill contingency plans, Spill collection equipment and, Spill reporting number posted (ability to adequately cleanup and respond to a spill on site).***
- ***Secure storage of hazardous material to prevent spillage.***

1. Is there Spill Clean-up equipment on-site? ☐ yes ☐ no
   Number of Pads _____
   Length of Booms (ft) _____
2. Is there a Spill Contingency Plan available on-site? ☐ yes ☐ no
3. Spill reporting phone number posted on-site (1-800-663-3456): ☐ yes ☐ no
4. Does the generator set have110% containment associated with it? ☐ yes ☐ no ☐ N/A
5. Are fuel valves and hoses protected from heavy traffic impacts? ☐ yes ☐ no

NOTES:

_____

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_____

L. INSPECTION SUMMARY

(i) STATUS OF LEGISLATIVE REQUIREMENTS

1(a) Non–compliance noted pursuant to the *Waste Management Act*, Aquaculture Waste Control Regulation, *Water Act*, *Wildlife Act*, federal *Fisheries Act* and BC Fire Code (1998).

Inspection Section	Compliance Status	Inspection Section	Compliance Status
(A) Disposal of Bloodwater	☐ Y ☐ N ☐ N/A ☐ U/K	(G) Firearms Provincial Licensing	☐ Y ☐ N ☐ N/A ☐ U/K
(B) Disposal of Net Cleaning Waste	☐ Y ☐ N ☐ N/A ☐ U/K	(H)(i) Treatment of Sewage	☐ Y ☐ N ☐ N/A ☐ U/K
(C) Fresh Water Use	☐ Y ☐ N ☐ N/A ☐ U/K	(H)(ii) Disposal of Sewage	☐ Y ☐ N ☐ N/A ☐ U/K
(E) Disposal of Morts	☐ Y ☐ N ☐ N/A ☐ U/K	(I) Disposal of Refuse	☐ Y ☐ N ☐ N/A ☐ U/K
(F)(i) Predator Prevention Trapping	☐ Y ☐ N ☐ N/A ☐ U/K	(J)(i) 110% Containment of Fuel	☐ Y ☐ N ☐ N/A ☐ U/K
(F)(ii) Predator Prevention DFO Licence	☐ Y ☐ N ☐ N/A ☐ U/K	(J)(ii) Disposal of Footbath Disinfectants	☐ Y ☐ N ☐ N/A ☐ U/K
(F)(iii) Predator Prevention Carcass Disposal	☐ Y ☐ N ☐ N/A ☐ U/K		

If not in compliance or compliance U/K (unknown) see below for further details.

Other Non-Compliance _____

_____

1(b) Required action to be taken by company.

Inspection Section	Legislation Contravened	Required action to be taken by company	Date action to be completed	Required response to Ministry

Service of this notice does not preclude the ministry from pursuing prosecution and / or administration action for the above-listed non-compliance issues.

(ii) STATUS OF MANAGEMENT PRACTICES

Comments recorded below may not encompass all management practices of site operation requiring improvement.

1. Recommended Improvements

_____

_____

_____

Company representative signature: _____

Ministry Inspector signature: _____

NOTE: Signature acknowledges representative provided a source of information for completion of checklist.

Copy of inspection summary provided to farm on date of inspection? ☐ yes ☐ no

Copy of complete inspection form provided to farm on date of inspection? ☐ yes ☐ no

Date forwarded to company headquarters _____

Appendix 1

SITE LAYOUT DIAGRAM

Provide a sketch of layout of farm, outbuildings and residence, net pen layout, etc.

IF MONITORING OCCURRED, INDICATE DIRECTION OF SAMPLING TRANSECT.
INDICATE NET PEN GPS LOCATION

Are any buildings, structures, equipment stored on upland areas adjacent to the farm? ☐ yes ☐ no

APPENDIX 5

LEGISLATION

Aquaculture Waste Control Regulation

http://www.qp.gov.bc.ca/statreg/reg/W/WasteMgmt/470_88.htm

Aquaculture Waste Control Regulation

Waste Management Act
B.C. Reg. 470/88
O.C. 2164/88
Deposited December 2, 1988

Interpretation
1. In this regulation

"dry weight" means the gravimetric determination of the total residue left in a vessel after drying to a constant weight at a temperature of 103° to 105° C;

"mortalities" means finfish that have died from disease, plankton bloom, stress or other similar causes and that are not marketed for human consumption;

"finfish net cage aquaculture operation" means a finfish net cage aquaculture operation located in tidal salt water at a site that is leased or licensed under section 35 or 36 of the Land Act;

"operator" means a person who owns a finfish net cage aquaculture operation and includes a person authorized by the owner to act as the operator.

Exemptions
2. A person who carries out a class of operation, activity, industry or work referred to in section 3 is exempt from the requirement to hold a permit or approval under the Waste Management Act in respect of the class if he meets the conditions and circumstances set out in section 3 in respect of the class and if he provides to the Regional Waste Manager, on his request, information that allows him to determine the existence and extent of the discharge of waste.

Classes
3. The classes of operations, activities, industries or works referred to in section 2 are:

(a) The introduction of finfish feed or finfish faeces to tidal salt water from a finfish net cage aquaculture operation where

(i) the total feed usage does not exceed 630 tonnes dry weight per year,

(ii) the use, storage and disposal of materials and wastes on or off the finfish net cage aquaculture site is carried out in a manner that minimizes odour, risk of spillage and attraction of and impact on wildlife,

(iii) the operator complies with a monitoring program, stipulated by the manager that allows the manager to determine

(A) the existence and extent of environmental impact caused by the operation,

(B) whether finfish aquaculture is likely to result in any alteration, disruption or destruction of wildlife, finfish, shellfish or their habitat,

(C) whether discharges of sewage are disposed of in a manner that causes pollution, and

(D) whether therapeutants, anesthetics, disinfectants, pesticides, wood preservatives, antifouling agents and other similar materials are stored and applied in a manner that causes pollution,

(iv) the operator complies with any requests by the manager for information in addition to the monitoring program under subparagraph (iii) for the purpose of allowing the manager to determine the matters set out in subparagraph (iii) (A) to (D),

(v) the operator notifies the manager regarding changes to the aquaculture operation that may affect the kind or quantity of the wastes disposed of or discharged,

(vi) pollution is caused by the aquaculture operation, and the operator, as soon as possible in the circumstances, reports the pollution to the manager and takes appropriate action, as directed by the manager, to ameliorate the pollution and prevent its recurrence, and

(vii) the operator prepares a contingency plan which documents procedures to be followed during a major fish kill, including the method of disposal of mortalities, and obtains the manager's approval to the plan;

(b) the introduction from a finfish net cage operation to tidal salt water of treated domestic sewage that is

(i) produced in a quantity that is less than 2.5 m3 per day,

(ii) produced from premises located on the foreshore adjacent to tidal saltwater, or on tidal saltwater,

(iii) collected and treated in a septic tank that provides at least 2 days retention time for the sewage,

(iv) discharged at a depth greater than 15 m below hydrographic chart datum within the boundaries of the operation, and

(v) located more than 125 m from commercial or recreational shellfish resources.

Offence and penalty

4. (1) Every person who

(a) makes, participates in, assents to or acquiesces in the making of false or deceptive statements in a return, record or answer filed or made as required by or under this regulation,

(b) omits, or assents to or acquiesces in the omission of, entries in records required by or under this regulation, or

(c) in any manner evades or attempts to evade compliance with this regulation commits an offence and, in addition to any penalty otherwise provided, is liable on summary conviction to a penalty not exceeding $2 000.

(2) No person commits an offence under subsection (1) (a) or (b) if he did not know that the statement or entry was false or deceptive and, in the exercise of reasonable diligence, could not have known that the statement or entry was false or deceptive.

[Provisions of the Waste Management Act relevant to the enactment of this regulation: Section 35]

APPENDIX 6

LEGISLATION EXCERPTS

(http://www.legis.gov.bc.ca/legislation/index.htm)

Waste Management Act

Wildlife Act

Water Act

The British Columbia Fire Code

WASTE MANAGEMENT ACT

CHAPTER 482

[Updated to November 2, 1999]

Part 2 — Prohibitions and Permits

Waste disposal — strict liability

3 (1) For the purposes of this section, the conduct of an industry, trade or business includes the operation by any person of facilities or vehicles for the collection, storage, treatment, handling, transportation, discharge, destruction or other disposal of waste.

(2) subject to subsection (5), a person must not, in the course of conducting an industry, trade or business, introduce or cause or allow waste to be introduced into the environment.

(3) subject to subsection (5), a person must not introduce or cause or allow to be introduced into the environment, waste produced by any prescribed activity or operation.

(4) subject to subsection (5), a person must not introduce waste into the environment in such a manner or quantity as to cause pollution.

(5) nothing in this section or in a regulation made under subsection (3) prohibits any of the following:

(a) the disposition of waste in compliance with a valid and subsisting permit, approval, order or regulation, or with a waste management plan approved by the minister;

(b) the discharge into the air of an air contaminant from an incinerator operated under authority, licence or permit of a municipality;

(c) the disposition of human remains in crematoria in compliance with the *Cemetery and Funeral Services Act;*

(d) the discharge of air contaminants authorized by a bylaw made under section 24 (3) (d);

(e) the burning of leaves, foliage, weeds, crops or stubble for domestic or agricultural purposes or in compliance with the *Weed Control Act;*

(f) the use of pesticides or biocides for agricultural, domestic or forestry purposes in compliance with the *Pesticide Control Act,* the *Pest Control Products Act* (Canada) and any other Act and regulation governing their use;

(g) burning if

(i) the burning is for land clearing, land grading or tilling,
(ii) the volume of material burned does not exceed in the aggregate 10 m^3 per hectare per month,
(iii) the duration of any burning is less than 24 hours,
(iv) the land on which the burning takes place is a part of or contiguous with the land from which the material originates, and
(v) no material other than dry wood, paper, cardboard or diesel fuel oil is used as fuel to start, assist or enhance the burning, without the specific permission of a manager;

(h) fires set or controlled by a person

(i) acting under an order of a local assistant, as defined in the *Fire Services Act*, if the local assistant orders the fire for training purposes, or

(ii) Carrying out

(A) fire control and suppression operations under section 89 of the *Forest Practices Code of British Columbia Act*, or

(B) a resource management open fire, as that term is defined in the Forest Fire Prevention and Suppression Regulation, B.C. Reg. 169/95, if the person carries out the fire in accordance with the *Forest Practices Code of British Columbia Act* and the regulations made under that Act;

(i) emissions from steam powered or internal combustion engines in compliance, if applicable, with the *Motor Vehicle Act* and regulations;

(j) emission into the air of soil particles or grit in the course of agriculture or horticulture;

(k) the disposal of waste by a person other than a municipality

(i) by means of a system of waste disposal lawfully operated by a municipality or other public authority, and

(ii) in compliance with the rules and regulations that apply to that system;

(l) emission of an air contaminant from combustion of wood or fossil fuels used solely for the purpose of comfort heating of domestic, institutional or commercial buildings;

(m) emission of an air contaminant from food preparation in

(i) Residential premises, or

(ii) Retail food outlets.

(6) nothing in subsection (5) (b) or (l) authorizes the use of an incinerator or domestic, institutional or commercial heating equipment for the purpose of destroying special waste by means of combustion.

(7) in subsection (5) (m):

"Residential premises" includes hospitals, clinics, logging camps, factory and office canteens and other similar premises;
"Retail food outlets" means
(a) restaurants, hotels, motels and similar premises, and
(b) premises in which food is prepared and sold by retail sale, such as
(i) exclusively retail bakeries, and
(ii) premises selling take out food.

Special wastes — confinement

4 (1) a person, who produces, stores, transports, handles, treats, deals with, processes or owns a special waste must keep the special waste confined in accordance with the regulations.

(2) except to the extent expressly authorized by a permit, approval, order, waste management plan or the regulations, a person must not release a special waste from the confinement required by subsection (1).

(3) if a special waste is released from or escapes from the confinement required by subsection (1), it is, for the purposes of this Act, deemed to have been introduced into the environment.

Spill prevention and reporting

12 (1) In this section, **"polluting substance"** means any substance, whether gaseous, liquid or solid, that could, in the opinion of the minister, substantially impair the usefulness of land, water or air if it were to escape into the air, or were spilled on or were to escape onto any land or into any body of water.

(2) If a person has possession, charge or control of any polluting substance, the minister may, if the minister considers it reasonable and necessary to lessen the risk of an escape or spill of the substance, order that person

(a) to undertake investigations, tests, surveys and any other action the minister considers necessary to determine the magnitude of the risk and to report the results to the minister,

(b) to prepare, in accordance with the minister's directions, a contingency plan containing information the minister requires, and

(c) to construct, alter or acquire at the person's expense any works, or carry out at the person's expense any measures that the minister considers reasonable and necessary to prevent or abate an escape or spill of the substance.

(3) If an escape or spill occurs of a substance for which a contingency plan was prepared, a manager may order any person having possession, charge or control of the substance at the time it escaped or was spilled, or the person who prepared the plan or all of them to put the contingency plan into operation at their expense.

(4) The minister may order a person who prepared a contingency plan to test the plan.

(5) If a polluting substance escapes or is spilled or waste is introduced into the environment other than as allowed or authorized by

(a) section 3,

(b) a bylaw under section 24,

(c) a waste management plan approved by the minister, or

(d) a permit, approval or order,

The person who had possession, charge or control of the substance or waste immediately before the escape, spill or introduction must, immediately after he or she learns of the escape, spill or introduction, report the escape, spill or introduction in accordance with the regulations.

(6) In a prosecution for a contravention of subsection (5), it is presumed that the accused knew of the escape, spill or introduction at the time of the alleged contravention and the burden of proving that he or she did not know is on the accused.

(7) The minister may amend or cancel an order made under this section.

WILDLIFE ACT

CHAPTER 488

Hunting and firearm licences

11 (1) A person commits an offence if the person hunts wildlife or carries a firearm unless

(a) the person holds

(i) a hunting licence issued to him or her under this Act, if the person hunts,

(ii) any limited entry hunting authorization required by regulation, if the person hunts,

(iii) a firearm licence issued to him or her under this Act, if the person carries a firearm, and

(iv) any other licence required by regulation, if the person hunts or carries a firearm, or

(b) the person, if he or she is under 19 years of age, complies with subsection (5) and

(i) holds a hunting licence, or

(ii) his or her parent or guardian holds a hunting licence on his or her behalf.

(2) A person must not issue a hunting licence for a person under 10 years of age.

(3) A person must not issue a firearm licence to a person under 19 years of age.

(4) A person under 19 years of age commits an offence if the person carries a firearm unless the person is accompanied by and under the close personal supervision of a person who

(a) is 19 years of age or older, and

(b) holds, or is exempted from holding, a hunting licence or firearm licence.

(5) A person under 19 years of age commits an offence if the person hunts unless the person is accompanied by and under the close personal supervision of a person who

(a) is 19 years of age or older, and

(b) holds, or is exempted from holding, a hunting licence.

(6) Despite subsections (1) and (4), a person may possess a firearm without a hunting licence or firearm licence in any of the following circumstances:

(a) aboard a boat used as his or her home;

(b) on property owned or occupied by the person or by his or her parent or guardian;

(c) while transporting a firearm as part of a move of household effects of his or her primary residence;

(d) if he or she is not a resident, while travelling in British Columbia in a motor vehicle on a highway as defined in the *Highway Act*.

(7) A person must not issue a trapping licence to a person unless the applicant is a citizen of Canada or a permanent resident of Canada.

(8) A person commits an offence if the person traps fur bearing animals unless he or she holds a trapping licence.

(9) Subsections (1) (a) (i), (iii) and (iv) and (8) do not apply to an Indian residing in British Columbia.

Offences

41 (1) A person commits an offence if the person does any of the following:

(a) willfully hinders, interrupts or causes or procures to be hindered or interrupted, a licensee or his or her managers, contractors, servants, agents, workers or any of them, in the lawful exercise of a right granted under this Act or the regulations or under a licence or approval;

(b) without lawful authority, willfully destroys, damages or interferes with the works of a licensee, a person who has obtained an approval or a person who has constructed the works in accordance with the regulations;

(c) opens or closes without authority a hydrant used for fire protection, or obstructs free access to a hydrant stop cock or hydrant accessory, or damages a hydrant stop cock or hydrant accessory;

(d) lays or causes to be laid a pipe, or constructs or causes to be constructed a ditch or other conduit to connect with the works of a licensee without authority from the comptroller, engineer or the licensee;

(e) molests, interferes with, delays, obstructs or otherwise impedes the comptroller or an engineer, water bailiff or other officer in the discharge or performance of a duty or the exercise of an authority under this Act;

(f) destroys, injures or tampers with
(i) works, or
(ii) a gauge, weir, measuring device, structure, appliance, cable, boat, instrument or tool belonging to or placed in position by an applicant, licensee or official of Canada or of British Columbia;

(g) places, maintains or makes use of an obstruction in the channel of a stream without authority;

(h) engages in the business of operating works to carry water for others without holding a licence or other authority issued in that behalf under this or a former Act;

(i) willfully interferes with a headgate, ditch or controlling works that an engineer, officer or water bailiff has regulated;

(j) willfully destroys a notice posted by an applicant, engineer, officer or water bailiff;

(k) constructs, maintains, operates or uses works without authority;

(l) puts into a stream any sawdust, timber, tailings, gravel, refuse, carcass or other thing or substance after having been ordered by the engineer or water recorder not to do so;

(m) diverts water from a stream without authority;

(n) diverts more water from a stream than the person is lawfully entitled to divert;

(o) diverts water that the person does not use beneficially;

(p) uses water when the person is not lawfully entitled to do so;

(q) uses water or permits water to be used on the person's land during a time he or she is ordered to cease the diversion of water or after his or her works have been closed or ordered closed;

(r) willfully contravenes this Act or an order of the comptroller or engineer, or neglects to do an act or thing required to be done by the person under this Act or under an order of the comptroller or engineer;

(s) makes changes in and about a stream without lawful authority;

(t) breaches a term or condition of a licence, an approval or the regulations;

(u) carries, supplies, conveys or transports water diverted from a stream without being authorized to divert, extract, use or store water from that stream, unless acting as agent for a person so authorized;

(v) contravenes section 4.

(w) [Not in force.]

(x) contravenes section 4 (3) of the *Fish Protection Act*;

(y) [Not in force.]

(z) contravenes an order under section 41.1 or 41.2.

The British Columbia Fire Code 1998

Office of the Fire Commissioner
Ministry of Municipal Affairs

B.C. Fire Code Committee 1998

4.1.6.Spill Control and Drainage Systems

4.1.6.1.Spill Control 1) A spill of flammable liquids or combustible liquids, including water used for fire fighting purposes, shall be prevented from flowing outside of the spill area and from reaching waterways, sewer systems and potable water sources by

a) constructing a non-combustible barrier of sufficient height to contain the spill, or
b) grading the site or sloping the floor to divert the spill to a drainage system conforming to Article 4.1.6.2 (See Appendix A.)

2) When barriers required in Sentence (1) are provided to contain accidental spillage from aboveground storage tanks, they shall conform to the requirements for secondary containment in Subsection first 4.3.7.

4.1.6.2.Drainage Systems

1) A drainage system referred to in Clause 4.1.6.1.(1)(b) shall

a) terminate at a location where such spill will not create a fire hazard or any risk to public health or safety, and
b) direct the spill away from buildings, means of egress, fire department access roadways, or valves controlling the flow of flammable liquids or combustible liquids or water supplies for fire fighting.

2) Closed drainage systems shall be equipped with a trap. (See Appendix A.)

4.1.6.3.Spills and Leaks

1) Maintenance and operating procedures shall be established to prevent the escape of flammable liquids or combustible liquids to areas where they would create a fire or explosion hazard.

2) Except as provided in Sentence (3), all reasonable steps shall be taken to recover escaped liquid and to remove or treat the contaminated soil.

3) Liquid spilled or leaked shall be
a) flushed to a location conforming to Article 4.1.6.2., or
b) removed with the aid of an absorbent conforming to Sentence (4), and
i) deposited in a receptacle conforming to Article 2.4.1.3., or
ii) disposed of in a manner that does not create a fire or explosion hazard.

4) An absorbent required in Sentence (3) shall
a) be non-combustible, or
b) conform to ULC/ORD-C410A, "Absorbents for Flammable and Combustible Liquids."

4.1.8.Handling of Flammable and Combustible Liquids

4.1.8.1.Containers and Storage Tanks

1) All flammable liquids and combustible liquids shall be stored in containers conforming to Subsection first 4.2.3. or in storage tanks conforming to Subsection first 4.3.1.

2) Containers and storage tanks for flammable liquids or combustible liquids shall be kept closed when not in use.

4.3.7. Secondary Containment for Aboveground Storage Tanks

4.3.7.1. General

1) The area surrounding a storage tank or group of storage tanks shall be designed to accommodate accidental spillage in conformance with Subsection first 4.1.6.

2) Where barriers described in Sentence 4.1.6.1.(1) are provided to contain accidental spillage from aboveground storage tanks, they shall conform to the requirements for secondary containment in this Subsection first.

3) A storage tank conforming to Sentence 4.3.7.4.(2) shall be considered as conforming to this Subsection first provided it is used and maintained in conformance with Articles 4.3.7.8. and 4.3.7.9.

4.3.7.3. Capacity (See A-4.1.6.1.(1) in Appendix A.)

1) Except as permitted in Sentence (3), a secondary containment for a single storage tank shall have a volumetric capacity of not less than 110% of the capacity of the tank.

2) Except as permitted in Sentence (3), a secondary containment for more than one storage tank shall have a volumetric capacity of not less than the sum of

a) the capacity of the largest storage tank located in the contained space, and
b) 10% of the greater of
i) the capacity specified in Clause (a), or
ii) the aggregate capacity of all other storage tanks located in the contained space.

3) When the secondary containment is designed to prevent the entry of precipitation and water used for fire fighting purposes into the contained space, it shall have a volumetric capacity of not less than the capacity of the largest storage tank located in the contained space.

4.3.7.8. Drainage

1) Liquids, debris and precipitation shall not accumulate in the contained space created by the secondary containment.

2) Provisions shall be made for removing liquid from the secondary containment in conformance with Subsection first 4.1.6.

3) Controls for the liquid removal system required in Sentence (2) shall be
a) normally closed,
b) accessible under fire exposure conditions, and
c) located so they can be operated from outside the contained space.

4.3.7.9. Use of Secondary Containment

1) The contained space created by a secondary containment shall not be used for storage purposes.